

# Report of the Director for the Session 1954-55

## ACCOMMODATION

FINAL plans have been drawn up and approved by the Court for the accommodation of the Institute on the University site on the north side of Gordon Square, in a new building to be shared with the Institute of Classical Studies which will also house new Examination Halls. Frequent meetings of the Accommodation Sub-Committee, in consultation with the Academic Board, were held; representatives of the corresponding committee at the Institute of Classical Studies attended several of these meetings, while the Director attended the equivalent meetings at the Institute of Classical Studies. As a result plans have been worked out, and after further discussion by the full Management Committee transmitted to the Senate, that provide adequate accommodation for the University's collections at present housed in St John's Lodge and for the other regular activities of the Institute, but allow no space for expansion. The immediate advantages both to staff and students of the transfer of the Institute to the University site in the immediate future may however be considered to outbalance this defect.

In the new building the Institute of Archaeology and the Institute of Classical Studies will share in the provision of certain services, including porterage. As the Institute was unable to promise to Mr R. C. Arnold, who has acted as Caretaker of the Institute since Manson's retirement in 1946, that he would automatically be employed in a similar capacity in the new building, to the great regret of the Director and staff Mr Arnold resigned in order to take up other employment where satisfactory living quarters were provided, on June 1st, 1955. Mr C. H. Dance was appointed in his stead, the Director of the Institute of Classical Studies being associated with the Director and Secretary in the final selection.

The redecoration of St John's Lodge required by the terms of the University's lease was completed early in the Autumn Term.



## INSTITUTE OF ARCHAEOLOGY

### STAFF

The Senate has accorded recognition to Dr Ian Cornwall, lecturer in the Environmental Department.

Sir Mortimer Wheeler, who was the effective founder of the Institute, its Honorary Director from 1939 to 1945, and part-time Professor of the Archaeology of the Roman Provinces since 1948, under the University regulations retires automatically at the end of the Session, to the great regret of all his colleagues and of the Management Committee, causing the loss to University teaching of an exceptionally gifted teacher and distinguished scholar. Believing that it would be impossible to find a worthy successor to Sir Mortimer in this important post, as a part-time Professor, the Management Committee decided to revert to the original plan of its Development Policy of 1947 that the Archaeology of the Roman Provinces should be entrusted to a Reader, and accordingly asked the Senate to institute a Readership in the subject. The Senate agreed to the Institute's request, and after advertisement has appointed Mr Sheppard Frere, from the 1st October, 1955.

As appointments to the post of Assistant in the Department of Prehistoric European Archaeology are limited to two years and under no circumstances renewable, Miss Isobel Smith will vacate her post at the Institute at the end of the Session, to the great regret of the Director and all her colleagues. The Management Committee has appointed Mr Arthur ApSimon, a former student of the Institute, to the post for the Session 1955-6.

Leave of absence was granted to Professor Zeuner for the months of February and March in the Spring Term, to enable him to continue research work at Jericho in collaboration with Dr Kenyon, and to do other field-work in the adjacent parts of the Near East. Particularly important results of Professor Zeuner's investigations, notably in connection with the remarkable preservation of wooden articles from some of the Jericho tombs, have already been announced in *The Times*.

Leave of absence was granted to Dr K. Kenyon for the Spring Term, to continue the direction of the excavations of the British School of Archaeology in Jerusalem at Jericho. Dr Kenyon's excavations this year have further emphasized the exceptional importance of this site, and made unique contributions to our knowledge of the earliest farming communities.

At the request of the British Institute of Archaeology at Ankara, leave of absence was granted to Mr M. B. Cookson from May 20th to July 1st, to allow him to assist the British Institute's Director in the excavations at Beycesultan. Some of Mr Cookson's photographs have already appeared in *The Times*, and the Director of the excavation in his report has expressed his high appreciation of Mr Cookson's work, and his gratitude to the Institute.



## REPORT OF THE DIRECTOR FOR THE SESSION 1954-55

At the June Meeting of the Management Committee, the Chairman read a letter from the Director saying that he wished to resign the post of Director of the Institute and Professor of Prehistoric European Archaeology as from the end of the Session 1955-6, in order that his successor might have the opportunity to supervise the last stages in the construction and arrangement of the Institute's new premises. A Sub-Committee has been appointed to make recommendations on filling the vacancy.

### TEACHING

Four Public Lectures were delivered at the Institute during the Autumn Term, on Tuesdays at 6.30 p.m., on 'From Village to City in the Near East—Ancient and Modern', to audiences ranging from 82-42. Professor Zeuner lectured on domestic animals, Miss Seton-Williams on the spread of the practice of agriculture, Sir Leonard Woolley on house building and early architecture, Miss O. Tufnell on the development of pottery, and Mrs Maxwell-Hyslop on the early smiths. In the Summer Term seven lectures on 'Town and Country in Antiquity' were delivered on Tuesdays at 8.15 p.m., to audiences ranging from 189-55. Themes selected were:—Prehistoric European Villages, Roman Slums, Cypriot towns and villages, Athens and the Agora, Roman North Africa, Assyria, and Tell el Amarna, the lecturers being respectively:—Professor V. G. Childe, Professor Sir Mortimer Wheeler, Miss du Plat Taylor, Mr E. Vanderpool, Mrs O. Brogan, Professor M. E. L. Mallowan, and Professor W. B. Emery.

### STUDENTS AND RESEARCH

The total number of students registered at the Institute during the Session was 73; besides these, 30 Intercollegiate students attended courses. Of those registered at the Institute, 13 were registered for Diplomas, 21 for Higher Degrees, 4 for special research under Statute 21 (iii) (2 full-time and 2 part-time), and 4 as full-time Technical Students, while 31 Occasional Students, of whom 11 were taking Technical courses only, have been attending lectures and using the facilities of the Institute.

For the Diploma in European Archaeology, Section A, 3 full-time and 4 part-time students have been working at the Institute; for Section B, 4 full-time and 1 part-time; and for the new Diploma in Prehistoric Archaeology, 1 student. Of the foregoing, one student was awarded the University's Diploma in European Archaeology A; one in European Archaeology B, with Distinction; one student was awarded the newly created Diploma in Prehistoric Archaeology, another student at the Institute passing this Diploma Examination as a Qualifying Examination for the M.A.



Of the 21 students registered for Higher Degrees, 7 were registered for the Ph.D. full-time and 5 part-time, 6 were registered for the M.A. full-time and 2 part-time, and one was registered for the M.Sc. full-time. Of the foregoing, Mr A. H. Dani of Pakistan was awarded the Ph.D. for his thesis on 'Prehistory and proto-history of Eastern India', Miss B. E. A. Jones was awarded the M.A. with Distinction for her thesis on 'The Religion of Roman Britain', and Mr J. B. Dalrymple was awarded the M.Sc. for his thesis on 'Study of ferruginous horizons in archaeological sections'. One student from Jordan with a scholarship partly provided by the British Council, Mr A. Dajani, was working at the Institute for the Ph.D. degree, and one Fulbright scholar, Mr E. H. Swanson, was registered as a full-time research student in the Environmental Department under Statute 21 (iii). Dr B. Subbarao was registered as a full-time research student in the Environmental Department under Statute 21 (iii), having been sent over for special training by the Government of India. Among the students registered at the Institute were the following from other countries:—2 from Australia, 1 from Canada, 1 from Ceylon, 1 from Cyprus, 4 from India, 1 from Jordan, 1 from Norway, 3 from Pakistan, 1 from the Sudan, and 5 from the U.S.A. During the Summer Term excursions, including a 4-day excursion to the Salisbury region over the Whitsun weekend, were arranged by the several Departments for their students.

The relics recovered by the late Sir Lindsay Scott during his excavation of the Neolithic barrow on Whiteleaf Hill, Bucks, have been temporarily deposited at the Institute, and the Director and Miss Smith have been preparing for publication a report on the excavations. Important material recovered by Dr Kenyon in her excavations at Jericho, by Professor Mallowan at Nimrud, and by Miss du Plat Taylor in Cyprus, is also being treated and studied at the Institute.

The Court has approved acceptance of a grant of £2,000 from the Department of Scientific and Industrial Research, to enable Professor Zeuner to continue his work on radio-carbon dating for a further three years. Mrs Vera Smith was appointed for this purpose as Assistant. The preparation of the samples is carried out in the geochronology laboratory of the Institute, but the actual counting is conducted at the Royal Institution, which bears the overhead costs of the maintenance of the apparatus. Some dates obtained in this way have been published in the last Annual Report.

## COLLECTIONS

Mr Wyman Abbott has deposited on loan in the Institute an exceedingly important collection of Neolithic and Bronze Age pottery and other artifacts, which he has collected over many years from the Peterborough district.



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From the Palestine collection the Management Committee has sanctioned the loan of selected specimens for the 'From the Land of the Bible' Exhibition which has been displayed in New York, London, Stockholm, and other capitals.

### PUBLICATIONS

No less than 89 foreign and 18 British periodicals which would otherwise have had to be purchased are received by the Library in exchange for the Annual Report, the publication of which will accordingly be continued. Articles on the revolution in the Palaeolithic sequence in South Russia, on the relative antiquity of British Bronze Age razors, and on a hoard of Roman gold objects found near New Grange, Ireland, are in the press.

## LIBRARY REPORT 1954-55

**T**HOUGH the number of books lent was not so high, a larger number of students worked in the library throughout the year.

The Lantern slide collection was substantially increased, and the loans to student lecturers were higher than 1952-53.

During the autumn Miss J. Philips was associated with the Library Staff to assist in keeping the Library open and Mr J. Butler was also employed.

Volumes added	500	Periodicals added	238
Purchased	241	Volumes bound	335
Presented	216	Volumes lent	2670
Exchanged	43	Highest month: October	372
Pamphlets	391	Lowest month: August	54
Purchased	232	Volumes borrowed from outside	
Presented	143	libraries	78
Exchanged	16	Volumes lent to outside libraries	19
		Lantern Slides added	852
		Lantern Slides lent	5067

The following have presented books and periodicals:—

Académie Bulgare des Sciences; The Algerian Government; Mrs Agnew; Mrs Amiran; K. Annable; E. Antevs; Dr Lius-Angel Arango; A. J. Arkell; Miss D. Ashcroft; K. Austen; J. Carswell; Prof. V. G. Childe; C.I.B.A. Review; J. Desmond Clark; Dr I. W. Cornwall; O. G. S. Crawford; G. C. Dunning;



Miss M. Eates; Per Fett; Miss I. Gedye; J. Harvey; the late Noel Heaton; H. Helbaek; Institut des Hautes-Etudes Marocaines; International Institute for Conservation of Museum Objects; R. F. Jessup; Dr Harper Kelley; Dr K. M. Kenyon; Dr F. A. Khan; Miss Koopman; A. D. Lacaille; I. D. Margary; Dr E. H. Markby; Lt-Col. G. W. Meates; Dr H. L. Movius, Jr; R. C. Musson; Dr Oscar Paret; D. Philips; E. Pyddoke; Dr Ramachandraiya; J. Ritson; Royal Archaeological Institute; National Museum of Antiquities of Scotland; Serviços Geológicos de Portugal; Miss Seton-Williams; R. E. F. Smith; Society of Antiquities of London; J. R. Stewart; Miss G. Stretton; Mrs Stylianou; Dr Subbarao; Professor T. Sulimirski; E. Swanson; Miss G. C. Talbot; Miss J. du Plat Taylor; A. C. Thomas; Tree-ring Society; Miss O. Tufnell; Sir Mortimer Wheeler; Ministerio de Justicia, Venezuela; General Y. Yadin; Prof. F. E. Zeuner.

## REPORT OF THE TECHNICAL DEPARTMENT

WORK was carried out on behalf of the following public bodies:—Alton (Curtis), York, Hitchen, Haslemere, and Winchester Museums; and for expeditions that have been excavating at Canterbury, Tornewton, Jericho, Nimrud and Lakish. A quantity of Assyrian ivory found by Professor Mallowan in the throne room at Nimrud was cleaned, strengthened and mounted. Some of the ivory had originally been lifted by the excavators on strips of gauze, so that the relative positions of the hundreds of small fragments had been preserved. All the numerous fragments had to be removed carefully from the gauze, cleaned, impregnated and mounted on wood or plastic; gaps left by missing parts were filled with a high melting point wax compound. Several more ivory panels were reconstructed from the numerous boxes of loose fragments brought back by the expedition. It was found that in some cases there were as many as four repetitions of the same series of designs, so that in many cases it was possible to reconstruct missing sections. Invaluable work was done by Miss M. M. Howard who was able to indicate missing parts of the original designs by incising them in the wax. She also undertook the preparation of drawings of the complete reconstructions.

In the second term small parties of students were taken to a number of museums in the London area, where methods of display, labelling, mounting, etc. were discussed. Two lectures were given at the Institute by Mr C. D. P. Nicholson, and arrangements were made for visits to The Courtauld Institute of Fine Art, the London Museum, the British Museum (Natural History), and the Ministry of Works Laboratory, Lambeth Bridge House.

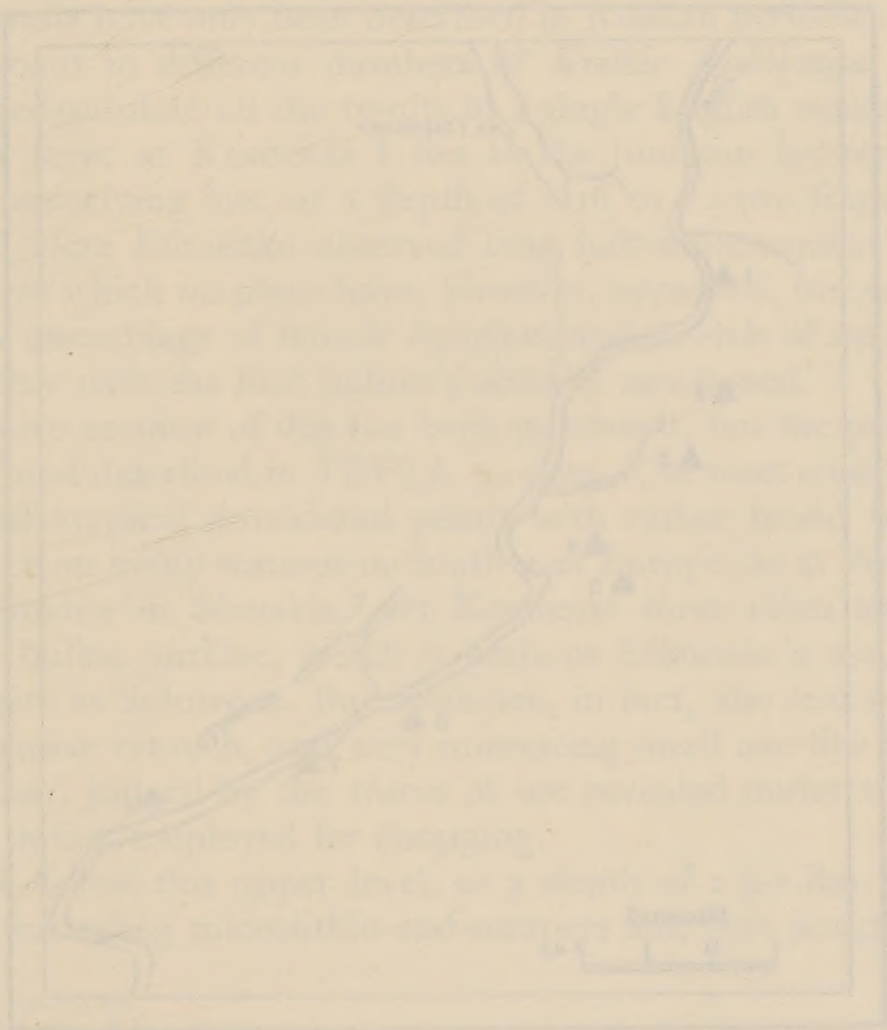


## REPORT OF THE PHOTOGRAPHIC DEPARTMENT

**T**HE time devoted to teaching was increased in this Session, with satisfactory results. The Student Darkroom was used 55 times in the last two terms.

Four Societies visited the Department, while the Instructor gave several outside lectures on photography applied to archaeology.

Teaching cinematograph films in colour, on the electrolytic treatment of iron and on the treatment of bronze, were produced in the Department, in co-operation with the Technical Department and the Department of Environmental Archaeology.





# Kostienski: 'East Gravettian' or 'Solutrean'?

By V. G. CHILDE

RESULTS of excavations published during the last five years at sites near the celebrated village of Kostienki on the Don are likely to affect our whole conception of the Upper Palaeolithic culture sequence in Western Eurasia. Deeper excavations at the site of Kostienki (Fig. 1) have revealed two cultural deposits below the well-known horizon with long houses, statuettes, and 'Gravettian' flints: a middle horizon with backed blades, end-scrapers, and gravers, and a lower horizon with no blade tools, but very thin

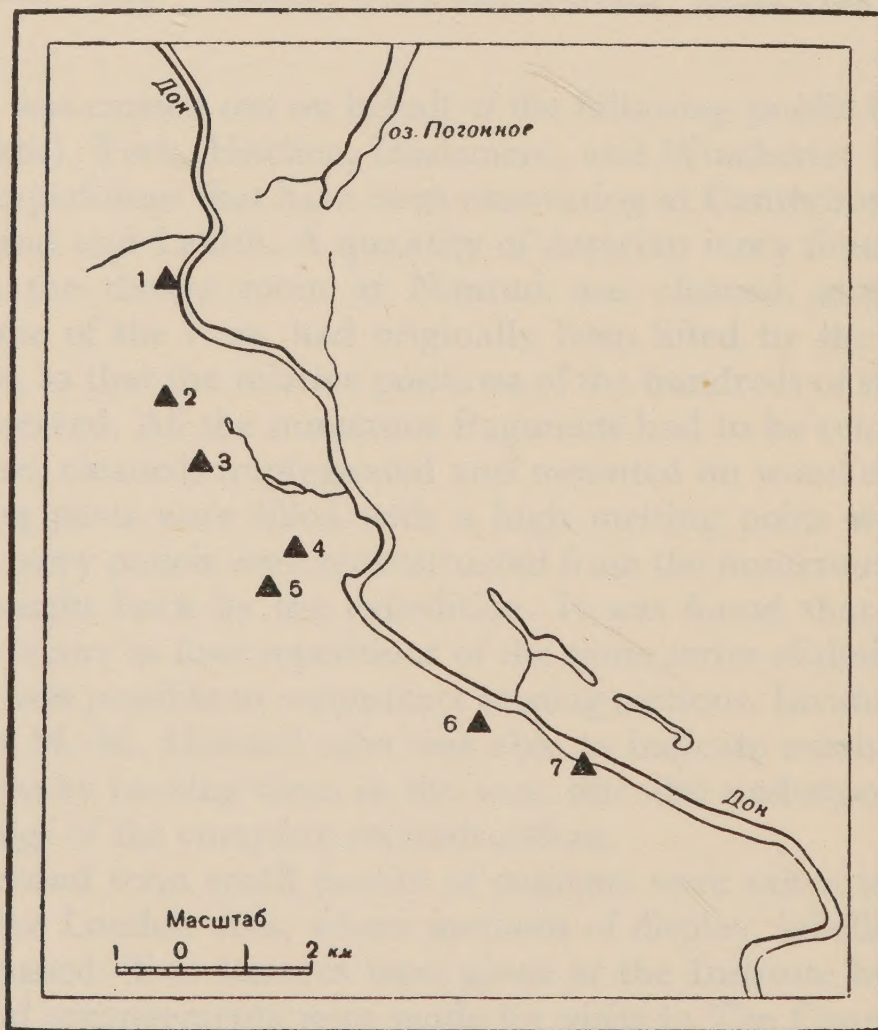


Fig. 1. Sites near Kostienki on the Don: 1, Kostienki III; 2, Kostienki I; 3, Kostienki II; 4, Kostienki IV; 5, Telman site; 6, Borševo I; 7, Borševo II.



triangular and leaf-shaped points worked on both faces in 'Solutrean' technique. At the same time, at the Telman site in the same area, below a horizon yielding 'Solutrean forms', come two horizons in which no bi-facially worked flints occur, but containing microliths, Gravette blades, end-scrapers and, in the lowest, also keeled scrapers, and other forms reminiscent of the Aurignacian.

These results are equally disconcerting to Russian and to British prehistorians. Garrod<sup>1</sup> like most prehistorians in Western Europe has accepted Kostienki I as the type station of the East European Gravettian. Efimenko<sup>2</sup> and most Soviet archaeologists, on the other hand, classify Kostienki I as 'Solutrean', or at least 'Aurignaco-Solutrean', on the grounds of the invasive retouch on the bulbar surface of the characteristic 'atypical shouldered points', and on leaf-shaped points. They accordingly expected to find below the upper layer an archaic Solutrean with Mousterian traits; it was, therefore, a shock to find instead a pure blade industry of more or less Gravettian character. To western prehistorians it was equally shocking to find a perfectly good 'Solutrean' under, and therefore preceding, the classical 'Gravettian' horizon.

As these results have only been described in Russian periodicals, and these are scattered about in different numbers of *Kratkie Soobščeniya*, it may be worthwhile to recapitulate all the results in a single English summary.

The upper layer at Kostienki I lies at the junction between the black earth and the underlying löss, at a depth of 1.16 to 1.35m. from the present ground surface. Here Efimenko observed long half-subterranean houses with several hearths, of which no plans have, however, appeared, but which yielded the well-known assemblage of female figurines and models of mammoths and cave-lion, together with the flint industry already mentioned.

No exhaustive account of this has been published, but the principal types were illustrated and described in *TINQA*. 5. 1935. The most conspicuous types are the so-called atypical shouldered points with rather broad tang (Fig. 2, 3-5), which recur on many stations in South-east Europe, as at Willendorf and Moravany-Podkovica in Slovakia.<sup>3</sup> At Kostienki these often show invasive retouch on the bulbar surface, which is perhaps Efimenko's main reason for classifying the site as Solutrean. But there are, in fact, also leaf-shaped points with similar invasive retouch, and very interesting small axe-like tools worked on both faces that, judged by the traces of use revealed under a high magnification,<sup>4</sup> were in fact employed for chopping.

In the löss, below this upper level, at a depth of 1.5-1.8m. was found a scatter of flints including microlithic end-scrapers and core scrapers (Fig. 2).<sup>5</sup>

<sup>1</sup> *PPS.*, iv, 1938, pp.11, 23.

<sup>2</sup> *Pervobytnoe Obshchestvo*, Kiev, 1953.

<sup>3</sup> *Arch. Rozh.*, ii, 1950, p.179.

<sup>4</sup> Semenov in *KS.*, xxxi, 1950, 168-173.

<sup>5</sup> *KS.*, li, 1953, pp.4-9.



The *middle layer* proper came below this at a depth of 2.2 to 2.6m. and was separated from it by a sterile layer. It yielded no less than two hundred flints, including forty gravers, twenty end scrapers on blades (Fig. 3), and a few microlithic blades with blunted backs, bone 'needles', decorated mammoth tusks and imported marine shells perforated as ornaments.

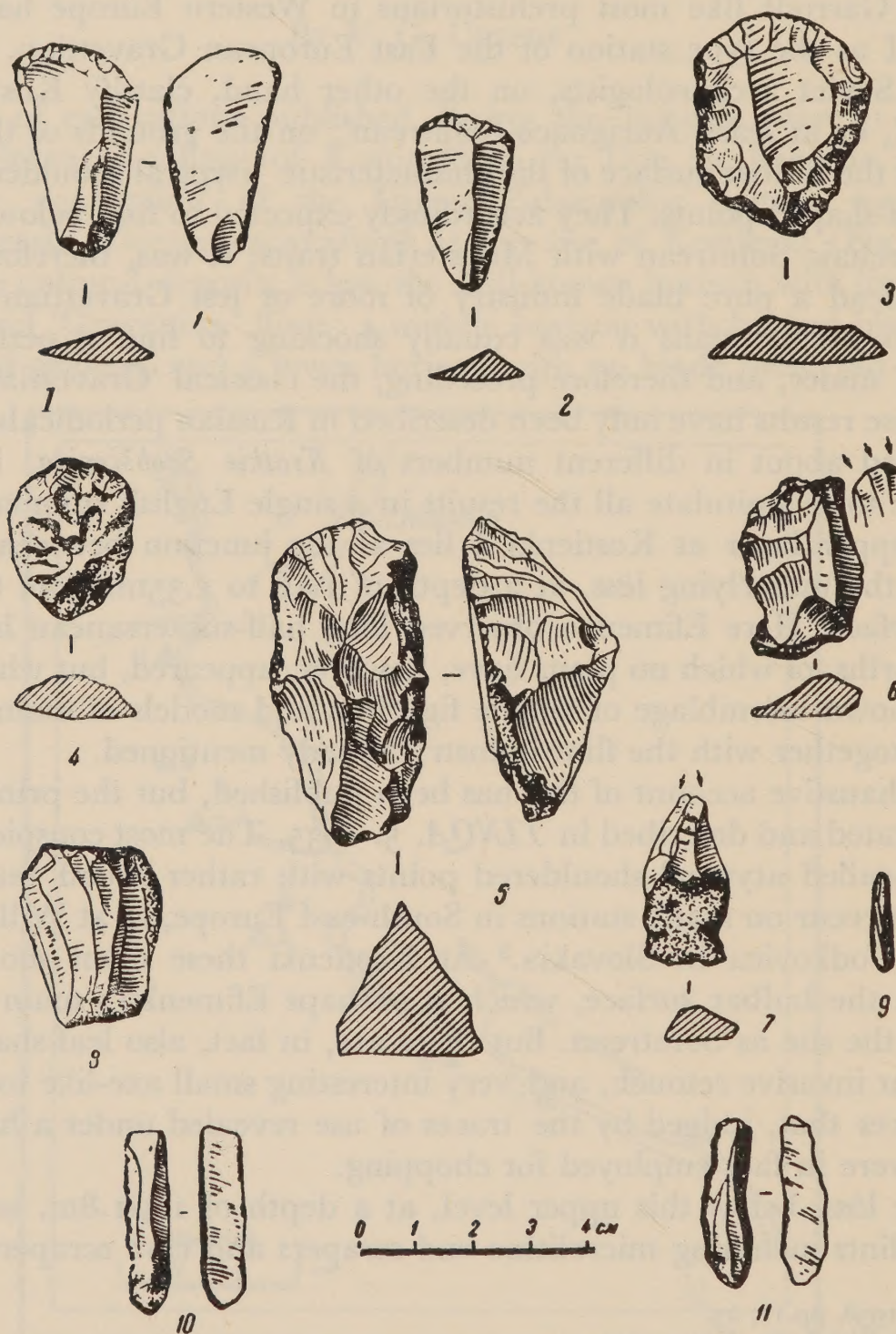


Fig. 2. Flints from layer -2 Kostienki.



In all the above levels good Senonian flint was regularly employed. This was conspicuously lacking in the *lower horizon*,<sup>6</sup> where quartzite and pebble flints collected on the surface of the ground were alone employed.



Fig. 3. Flints from the Middle Layer (-3) at Kostienki I, 4/5. After Rogačev.

This horizon lies on or in a double layer of fossil humus. A few tools of flint and quartzite, together with bones of horse and mammoth, were found  
<sup>6</sup> *Ibid.*, pp.10-14; xxxi, 1950, pp.65-73.



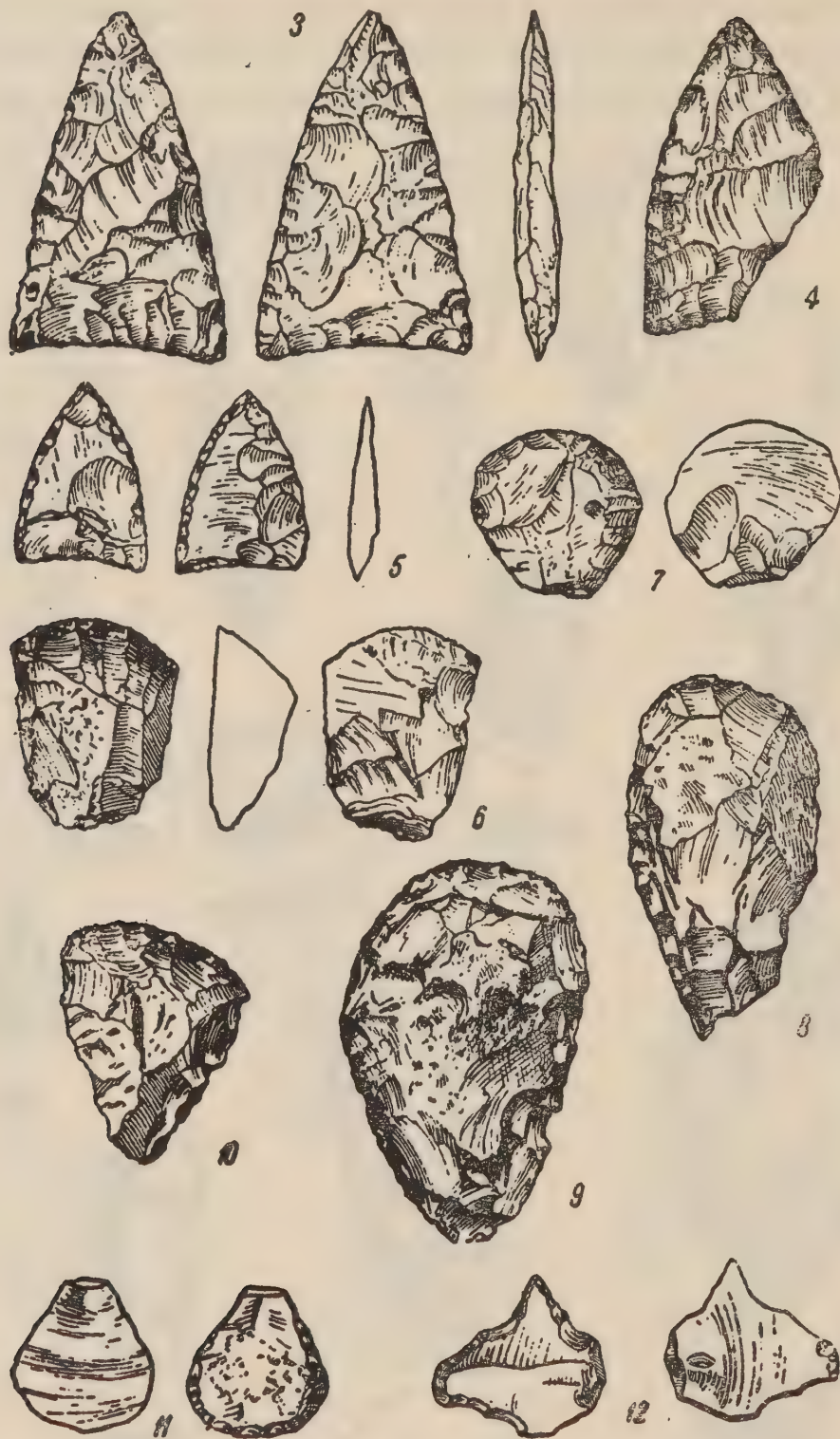


Fig. 4, a. Flints from Lower Layer at Kostienki I, 4/5. After Rogačev 1950.

scattered about on the surface of this soil, 3.15-3.25m. below the present turf level, but the main layer, in a hollow in the humus, lies at a depth of 3.5 to 3.8m. Here no bones survive (?destroyed by humic acids), but the ashes from a hearth and quite a number of flints were found. Blade cores and true blades were conspicuously absent. The flints included six gravers, eleven



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scrapers, four borers, and bi-facial tools; among these last are the remarkable 'hollow-based arrow-heads' (Fig. 4, 3-4), and a 'biface' made apparently on a core or thick flake (Fig. 5). The 'arrow-heads' are certainly very thin, worked in the best pressure technique; very similar 'arrow-heads', but made in inferior



Fig. 4, b. Flints from Lower Layer at Kostienki I, 4/5. After Rogačev 1950.



material—dolomite, lydite, jaspis—came from Ilskaya on the Kuban<sup>7</sup> (*TINQA* 5, 213), but analogies have been found also in Western Europe, notably at Cueto de la Mina.<sup>8</sup>

At the Telman site, also at Kostienki,<sup>9</sup> there were found in the upper layer in 1937 traces of the foundation of a round house 5.2 to 5.6m. in diameter, sunk .4 to .7m. in the then ground surface. It yielded a large collection of bone and flint implements which have never been exhaustively published. It is said, however, that all the flints were 'shaped by the application of the Solu-



Fig. 5. 'Biface' from Lower Layer at Kostienki I, 4/5.

trean technique' and show a high level of technical skill. They include bifacially trimmed leaf-shaped points on long flakes (Fig. 6) and massive points resembling in form Mousterian points; end scrapers and backed blades were conspicuously missing, but graters and bone tools are mentioned. These peculiarities of the flint-work led the veteran Efimenko to write 'obviously in the Telman site we can see the first well-defined set of forms attributable to an early stage of the Upper Palaeolithic, with traits pointing substantially to the preceding culture of the Late Mousterian of the type of Ilskaya and Chokurča'.

Here again fresh excavations in 1949 revealed,<sup>10</sup> over a metre below the

<sup>7</sup> Zamyatnin, *TINQA*, v, 1935, p.213; Gorodtsov, *MiL.*, ii, 1941, pp.7-25.

<sup>8</sup> Obermaier, *Fossil Man in Spain*, Fig. 78.

<sup>9</sup> Efimenko, *op. cit.*, pp.326-7; Rogačev, *KS.*, xxxvii, 1951, pp.23-26.

<sup>10</sup> Rogačev, *loc. cit.*; cf. *SA.*, xxi, 1954, pp.12-14.



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foregoing, a humified layer containing a lower archaeological horizon which was marked by many bones of mammoth and other animals, bone and wood

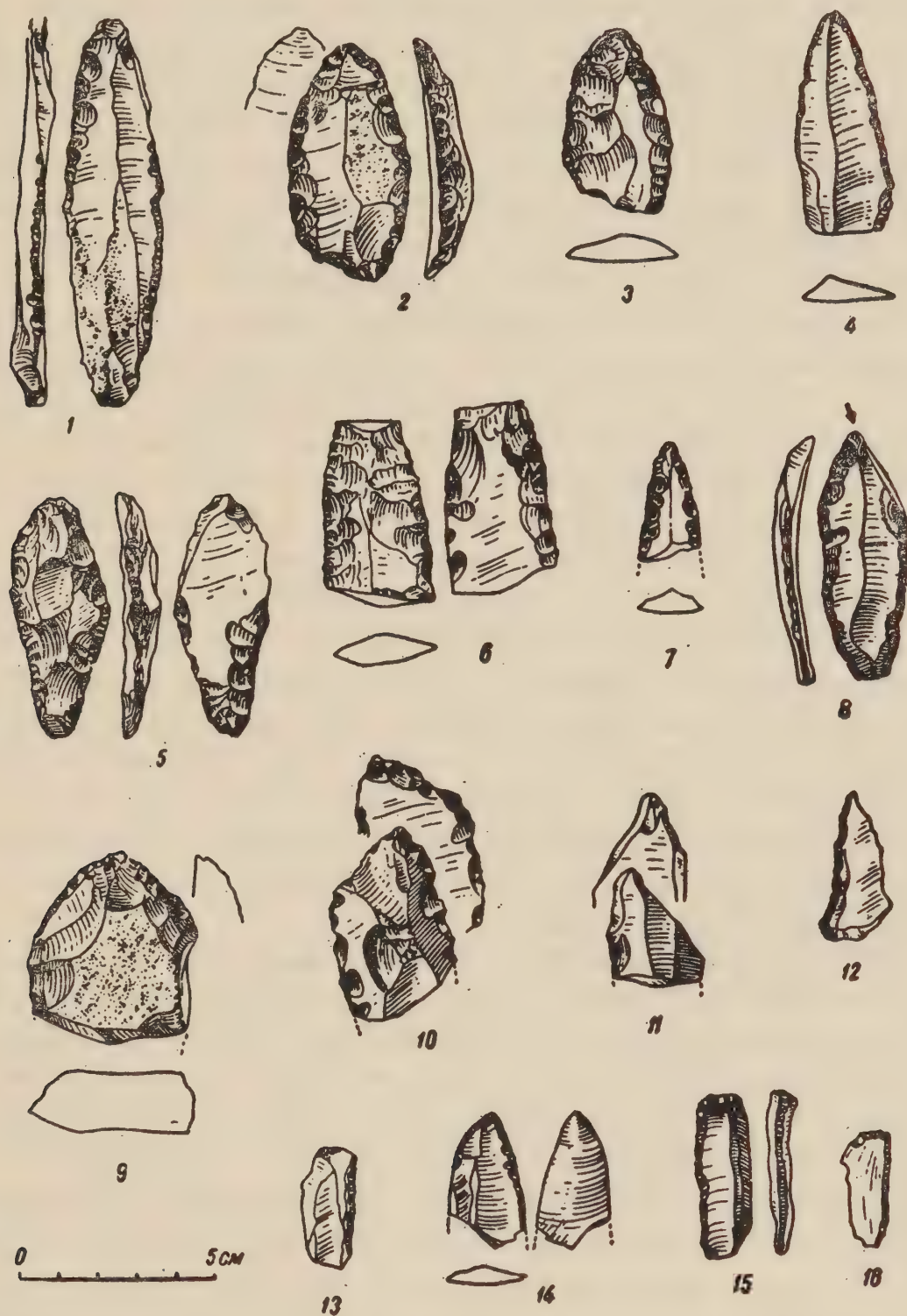


Fig. 6. Flints. 1-6 Telman station, Upper Level; 7-10 Kostienki V Upper Level; 12-16 Lower Level.

ash, and, at many points, was stained with red ochre. The flints were in a different state of preservation from those of the upper horizon, lacking the



thick white patination. The implements included some eighty microlithic blades with blunted backs, and about ten larger backed blades recalling the Gravette type, as well as some notched blades.

Similar results were obtained at Kostienki V, first examined by Efimenko in 1928. Here a small excavation in 1949 brought to light the flints shown in Fig. 6, 12-16, in a lower horizon below the layer which yielded numbers 7-10 that approximate to the types from the Upper Telman site.

Comparable results have been, less fully, reported from Kostienki IV (Fig. 1, 4).<sup>11</sup> Here again was an Upper layer with round hut foundations that yielded a bifacially trimmed Solutrean point said to be 'exceptionally regular and typical'. Below it came another 'pre-Magdalenian' horizon from which are reported plenty of Gravette points, backed blades, end and core scrapers, and relatively long shouldered points recalling those from Gagarino and Borševo I, but, like the latter, 'coarser and more primitive' than those from Upper Kostienki I, Avdievo and Willendorf. They might illustrate the root from which the classic Kostienki I type sprang. However, Okladnikov states that shouldered points trimmed on both faces in Solutrean retouch do occur at Kostienki IV, but without mentioning explicitly the layer.

Geological data are too much disputed to be conclusive in correlating the Russian cultures with those of the rest of Europe. Kostienki I and Telman<sup>12</sup> lie on the second terrace, 15-20m., of the Don, Kostienki III and IV on the first, 8-10m. terrace, from which the fossil humus seems missing. Despite the apparent absence of the fossil humus it is not by any means certain that the geological deposit in which Kostienki III and IV lie was really laid down after the upper terrace deposits in which Kostienki I lies had been cut through; both deposits may have been laid down at the same time after the river had cut down through the upper terrace.

The fossil humus with which Lower Kostienki I is associated clearly indicates a relatively mild period—two grains of *pinus* pollen were identified from the lowest, pollen of hazel, too, from the second. Frost deformation above reflects a return of cold conditions. Griščinko<sup>13</sup> in 1951 equated this event with Würm I, and so treated the preceding temperate phase as last interglacial.

In the same way Ilskaya on the Kuban had been regarded as late interglacial, and the industry classed as a sort of Mousterian. But Gorodtsov's<sup>14</sup> excavations had shown that the assemblage of stone tools, despite Mousterian points and D-scrapers, was 'essentially an Upper Palaeolithic industry with only local peculiarities'; he found, that is, prismatic, as well as disc, cores, and a dozen graters, including a '*burin busqué*'. The fauna includes mammoth,

<sup>11</sup> *SA.*, xxi, pp.15-6.

<sup>12</sup> *KS.*, xxxi, pp.75ff., *MiL.*, xxxix, 1953, pp.52-6.

<sup>13</sup> *KS.*, xxxi, p.79.

<sup>14</sup> *MiL.*, ii, 1941, pp.14f.



saiga, and bison, as well as giant and red deer, and so, for the Kuban valley, is not very warm. In fact Ilskaya, like Lower Kostienki I, can perfectly well be interstadial. In that case this archaic industry with bifaces would fall into line with the Szeletian of the Carpathian basin that, as Prošek<sup>15</sup>, Gabori<sup>16</sup> and Vértes<sup>17</sup> have shown, is more certainly interstadial.

Now, in Slovakia the early Szeletian is not only geologically contemporary with the local Aurignacian, but is associated with implements of Aurignacian type, including notably Mladec (Lautsch) points of bone. The Szeletian, best known from temporary hunters' camps and 'factory sites' in which more domestic tools like scrapers and gravers are not to be expected, is certainly not identical with the industry of Lower Kostienki I, for 'hollow-based arrow-heads' are missing. It is, however, closely related not only in the use of bifacial retouch, but also in the prominence of 'Mousterian' elements, and would be contemporary if Lower Kostienki I and Ilskaya be accepted as interstadial. That the two industries do not appear homotaxial might be due to the apparent absence on the Russian plain of counterparts to the Audi and Chatelperron types of Western Europe, to which Okladnikov<sup>18</sup> drew special attention in 1954.

Plainly the newly discovered industry of Lower Kostienki I and the consequent possibility of a revaluation of Ilskaya remove one objection to Breuil's<sup>19</sup> one-time suggestion that 'the Solutrean' originated in the Carpathian basin; it could no longer be complained that 'the Solutrean' expanded in a curiously lopsided way to the west only. It does not, however, afford any confirmation of the now abandoned hypothesis, but on the contrary it would lend support to Breuil's more recent suggestion<sup>20</sup> that 'a Solutrean might have evolved at different points like Hungary and Spain'. But then 'the Solutrean' becomes a meaningless and actually deceptive symbol. It would surely be wiser to restrict it to the well-known West European assemblages and use different designations for cultures that share with it certain type fossils, as Czech and Hungarian prehistorians agree to term 'Szeletian' the former 'Hungarian Solutrean and Proto-Solutrean'. A 'Solutrean period' is of course only a source of confusion; if archaeologists cannot agree on a geological substitute, we might perhaps say Upper Palaeolithic II, putting the French Perigordian-Aurignacian series in Ia-e and Magdalenian in IIIa-f. Even the expression 'Solutrean technique' is ambiguous. Breuil<sup>21</sup> has recently pointed out that the superficially visible results generally attributed thereto can in fact be produced either by pressure or by

<sup>15</sup> *Slovenska Archaeologia*, i, 1953, pp.185ff.; *PA.*, xlv, 1954, pp.73ff.

<sup>16</sup> *Acta Arch. Hung.*, iii, 1953, 1-68.

<sup>17</sup> *Ibid.*, v, 1955, pp.19; pp.261ff. In the latter article Vértes argues that Early Szeletian is parallel to Aurignacian I with split based bone points.

<sup>18</sup> *SA.*, xxi, p.18.

<sup>19</sup> *L'Anthr.*, xxiii, pp.337ff.

<sup>20</sup> *Les Subdivisions du paléolithique supérieur*, 1937, p.34.

<sup>21</sup> 'Apropos de l'industrie atérienne', *BSPF.*, xlvii, 1950, p.57.



controlled percussion with wood (*au bois par percussion appuyée*). (The distinction can be made by an expert but not by the average excavator, and could not be deduced from pictures.)

Russian prehistorians have, as we said, always envisaged a derivation of their 'Telman Solutrean' from a Mousterian of the type seen at Chokurča in Crimea<sup>22</sup>—a Mousterian so strongly 'à tradition acheulean' that Breuil<sup>23</sup> seems to refer to it as *acheulien tardive*—and Lower Kostienki I seems to provide the requisite intermediate forms. The two large points like Fig. 5, 12.5m. long, could easily be derived from such 'hand-axes'. On the other hand, bifacially trimmed 'Mousterian points' on flakes occur widely if rather sporadically in recognized Mousterian horizons in the west.<sup>24</sup> (In the Szeletian Vértes<sup>25</sup> distinguishes a Transdanubian facies with laurel leaves made on flakes from another in which cores were used.) Conversely 'Mousterian survivals' are conspicuous in many classic Solutrean sites in Western Europe. Though these have only recently been admitted<sup>26</sup>—or readmitted—the high proportion of flake tools and disc cores, for instance in the old Solutrean collections in the British Museum, is really striking.

Now in the light of the finds from Middle Kostienki I and Lower Kostienki-Telman, Okladnikov<sup>27</sup> finds it 'permissible to suppose that the development of local culture from the Mousterian of Acheulean tradition represented at Lower Kostienki I was interrupted by a spread of new settlers coming from Western Europe and leaving behind them relics of a new kind—Middle and Upper Aurignacian in type'. He even goes on to envisage the possibility 'that the spread of Solutrean in Western Europe right to Spain was connected with the spread of Solutrean society of the Upper Palaeolithic in the opposite direction, i.e. from East to West'.

In any case the industries of the Telman station and Upper Kostienki I can be explained as a blend of the old local tradition inherited from this local Middle Palaeolithic with the new Upper Palaeolithic blade and burin tradition, whether that came from Western Europe or from the south. If Lower Kostienki I be really interstadial, still more if it were interglacial, the 'East Gravettian' as represented at Upper Kostienki I could still be homotaxial with Garrod's Gravettian in Western Europe. It could hardly be earlier and mark a stage in the westward migration of that Gravettian of which Venus figures are such a distinctive trait. In their flints Middle Kostienki I and Lower

<sup>22</sup> *TINQA*, v.

<sup>23</sup> *Les subdivisions*, p.34.

<sup>24</sup> Freund, *Die Blattspitzen des Paläolithikums in Europa*, Bonn, 1952.

<sup>25</sup> Istállóskő, *Acta Arch. Hung.* V, 1955; 'Transdanubian' (Dunantul) to a Hungarian means on the right bank of the Danube.

<sup>26</sup> Cf. Francisco Jordá Cerda, *El Solutrense in España*, Oviedo, 1955, pp.63-9; Peyrony. *Laugerie-Haute* (Inst. Pal. Hum., *Mem.* 19), pp.35, 80; Bordes and Fitte, *BSPF.*, xlvii, 1950, p.153.

<sup>27</sup> *SA.*, xxi, pp.18-20.



Telman already look more Gravettian than Châtelperronian, but lack Venus figures so far—after all, only a small area has been excavated.

On the other hand, Okladnikov's suggestion is in harmony with Garrod's<sup>28</sup> revised view on the western origin of the Aurignacian (his middle Aurignacian). Vértes latest paper on the culture sequence in the Istállóskö cave could likewise support her thesis. It is true that he adheres to her original theory of a south-eastern origin; but at Istállóskö too he has established stratigraphically the position of Aurignacian II with Mladec points as later than the assemblage with split-based points, though both are interstadial. He notes<sup>29</sup> that it is with Aurignacian II (Bayer's Olschewian) that the most Mousterian—or Levallois-Mousterian—reminiscences are associated, and suggests that on the right bank of the Danube two groups, preserving the (Mousterian) tradition of cave bear hunting, crystallized out under the impact of the first Aurignacian infiltration: one, taking over the new technique of bone working, produced the Aurignacian II culture, while the other developed the Early Szeletian (that existed already side by side with Aurignacian I), into the mature Szeletian.

But incidentally, a microlithic backed blade like those from Middle Kostienki I was found in the Aurignacian II horizon at Istállóskö.<sup>30</sup>

<sup>28</sup> *Journal of World History*, I, 1953, 27-35.

<sup>29</sup> *Acta Arch. Hung.* V, 126, 272-5, 287.

<sup>30</sup> *Ibid.*, 125.

### UNUSUAL ABBREVIATIONS

<i>Arch. Rozh.</i> ,	<i>Archeologické rozhledy</i> , Československa Akademie Ved, Praha.
<i>Mi.I.</i> ,	<i>Materialy i Issledovaniya po Arkheologiya Rossii</i> , Moskva-Leningrad.
<i>TINQA.</i>	<i>Transactions of the 2nd International Congress of the Association for the Study of the Quaternary Period</i> , Moskva-Leningrad. Vol. V.
<i>KS</i>	<i>Kratkie Soobsčeniya o dokladokh i polevykh issledovaniyakh</i> (Institut Istoiri Material'noi Kultury) Moskva-Leningrad.
<i>SA.</i>	<i>Sovietskaya Arkheologiya</i> (Akad. Nauk, Moskva-Leningrad).



# Razors, Urns, and the British Middle Bronze Age

BY JAY J. BUTLER AND ISOBEL F. SMITH

## PREFACE

THE conclusion set forth in this paper—that certain cinerary urn graves containing Class I razors conventionally dated to Late Bronze Age II must in fact belong to the Middle Bronze Age—was arrived at independently by its joint authors, one (J.J.B.) on the basis of the razor evidence, the other (I.F.S.) on the basis of the pottery. Since the two lines of evidence interlock so closely, it has been thought desirable to present the results in a single paper.

Part I describes a series of razors of the Tumulus Bronze Age on the Continent, and their relation to British Class I razors. Part II discusses the dating of the British razors in the light of the Continental and British evidence, and suggests that certain categories of cinerary urns now classified as Late Bronze Age must have been flourishing in the preceding phase. Many aspects of the urn problem admittedly require much fuller discussion than can be attempted here; but it is hoped that one obstacle to the understanding of the development of the British urn cultures has been removed, and a contribution made to the rehabilitation of the now sadly depleted Middle Bronze Age.

## PART I

### A. *Tanged Razors of the Tumulus Bronze Age*

The tanged razors listed in Appendix I and illustrated, Figs. 1-3, come mainly from graves, hoards and settlements of the Tumulus Bronze Age. There are seven razors from South Germany and one from Switzerland, to which are added four from North Germany and one from The Netherlands. The list makes no claim to completeness; it includes, besides published examples, several unpublished specimens noted by one of the writers (J.J.B.) in German museums in the course of a study tour in 1954<sup>1</sup>; others may no doubt exist. As a group they have escaped attention in the literature, both in this country

<sup>1</sup> The tour was made possible by the generosity of the Wenner-Gren Foundation for Anthropological Research, Inc., of New York, which awarded the writer a Pre-Doctoral Fellowship; further financial assistance was granted by the American-Scandinavian Foundation. I am deeply grateful to these two foundations for their support. Acknowledgements for assistance in collecting the material included in this paper are made at the end. —J.J.B.



and on the Continent, despite their importance for the history of the British razors.<sup>2</sup>

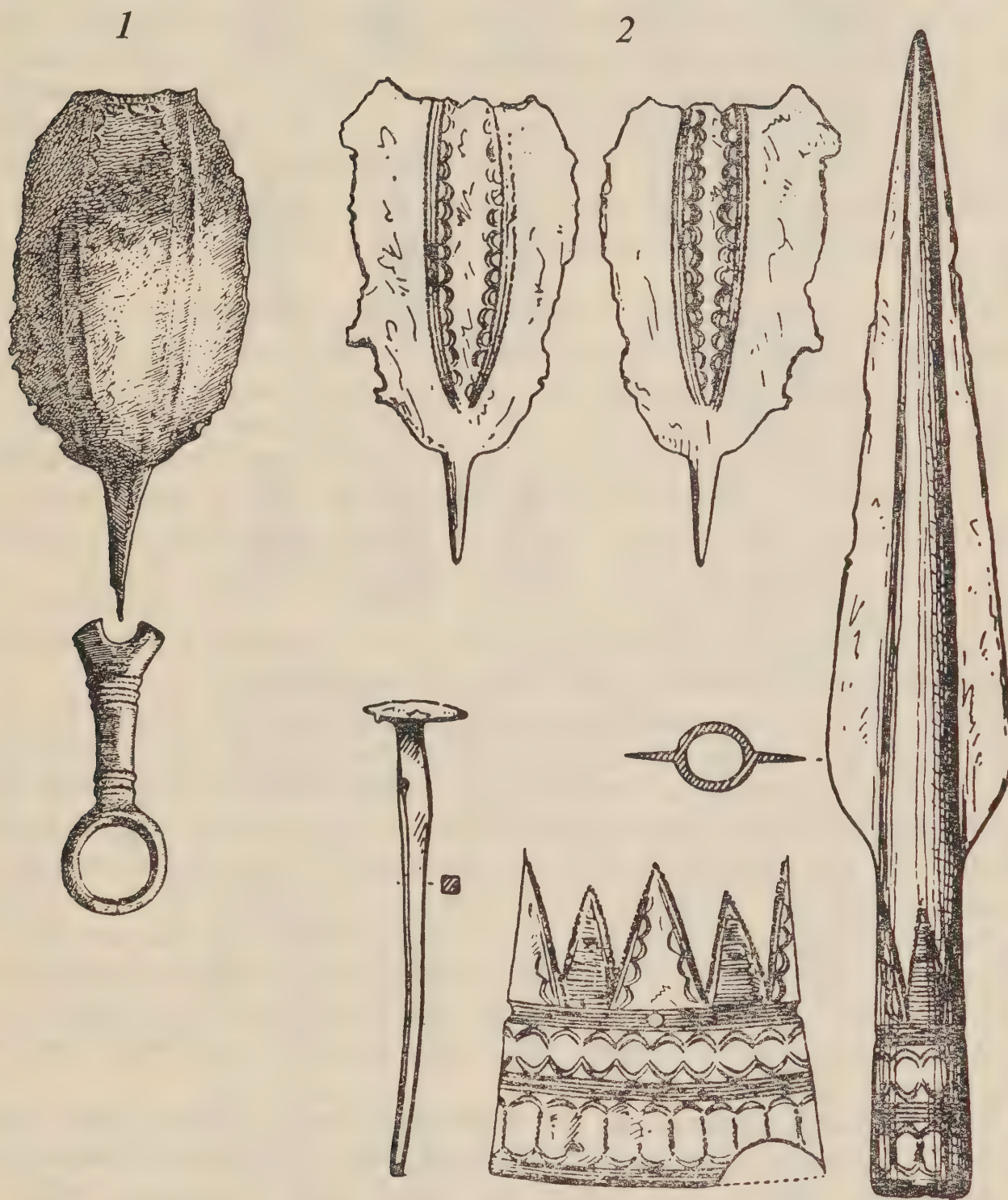


Fig. 1. (1) Onstmettingen. Razor with separately cast bronze handle. After Kraft. (2) Brucker Forst. Razor, spearhead, pin. After Stroh. 1/2.

<sup>2</sup> Cf. C. M. Piggott, 'The Late Bronze Age Razors of the British Isles', *PPS.*, xii (1946), 121-141, with a corpus of drawings and full discussion of the British Bronze Age razors. The present paper is merely a supplement to Mrs Piggott's admirable study; frequent reference to it is made in the following pages. Razors listed in Mrs Piggott's schedule are here referred to by a P. followed by Mrs Piggott's number. (See also Mrs Piggott in *PSAS.*, lxxxi (1946-7), 171-3.)



The Tumulus razors are rather larger than British Bronze Age razors; their tangs are proportionately smaller and in most cases more pointed. The most common form is oval but with a broad shallow notch at the end of the blade. Two South German specimens, Brucker Forst, Fig. 1, 2, and Onstmettingen, Fig. 1, 1, have incised decoration (discussed below, p.24). The Onstmettingen razor and those from Hilzingen (Fig. 3, 4) and Spiez have shallow fluting on the blade. All have rounded shoulders except one, a razor from Alteiselfing (Fig. 3, 3), which also differs from the others in having a short broad tang containing two rivet-holes. None has a distinct midrib or a hole in the blade.

The Onstmettingen razor is unique in having a separately cast metal handle, with a socket to receive the tang of the razor and a ring at its end. This provides an interesting link between the simple tanged razor and the well-known Central European type with a ring-handle cast all in one piece.<sup>3</sup>

The few North German razors and the much-discussed Drouwen example from the province of Drenthe in The Netherlands (Fig. 2) differ from the South German type in having a tendency toward long tangs and pointed blades. Two are from the North Friesian island of Amrum (Fig. 3: 6, 7); a third specimen from Schleswig-Holstein is without exact provenance. A razor in the Museumsdorf Cloppenburg (Fig. 3:2), probably a local find, has a fluted blade and a broad V-notch; the tang is broken off.

Doubt has been expressed as to whether the Drouwen tanged blade is really a razor. Van Giffen described it originally<sup>4</sup> as a lancehead or arrowhead (although he compared it as to form with British Class I razors), and Mrs Piggott treats it with great reserve. But the lance- or arrow-head suggestion does not seem very convincing; the blade is described in Glasbergen's recent re-discussion of the find as 'paper-thin',<sup>5</sup> which would hardly do for a missile weapon, and in any case there are nine perfectly functional flint arrowheads in the same grave. Examination of the original specimen at Groningen convinced the writer that it is really a razor, and Glasbergen (in a letter to the writer) expresses the same opinion. Its form is more like the British than the South German razors.

Both the South German and the Northwest German tanged razors make their initial appearance at the very beginning of the Tumulus Bronze Age. The decorated Brucker Forst razor was found with a spearhead which is decorated in a similar style, and with a pin of Hungarian form which in Southwest Germany is typical of Holste's Lochham stage, his Earliest Tumulus horizon (Reinecke B.1). The Drouwen razor belongs to a fine grave-group

3 As Childe, *The Danube in Prehistory* (1929), Pl. V: A1, A2.

4 *Die Bauart der Einzelgräber*. I. Mannus-Bibliothek, 44 (1930), 84-93.

5 *Palaeohistoria*, iii (1945), 145 and fig. 68.



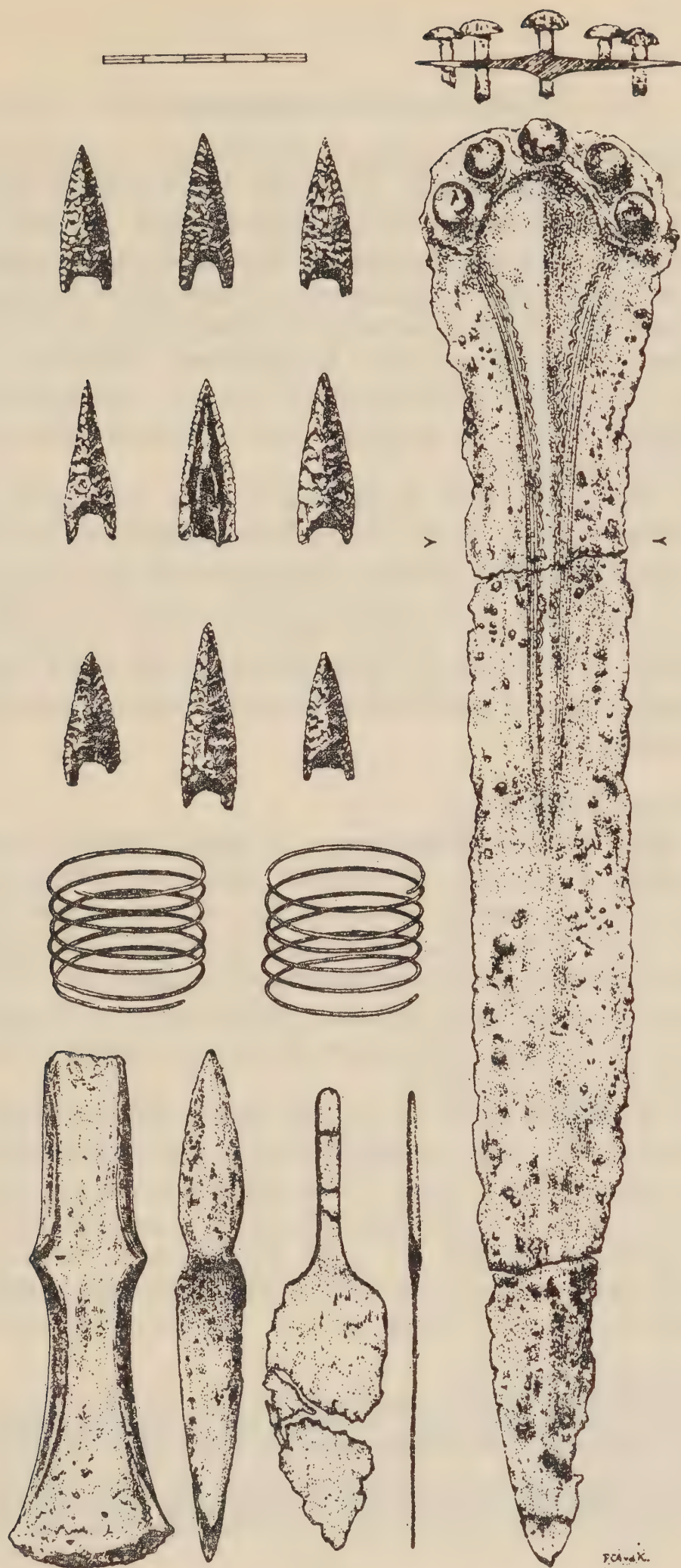


Fig. 2. Drouwen. Dirk, nicked flanged axe, razor, gold spirals, flint arrowheads.  
After Glasbergen. 1/2.



including a Sögel short sword (decorated with the same combination of incised and *pointillé* lines embellished with arcs as the Brucker Forst razor), a nicked flanged axe, a slate whetstone, two gold spiral rings, and the nine hollow-based flint arrowheads already mentioned. The Sögel stage, to which the grave belongs (and of which stage it is quite typical), is equated by Sprockhoff with the end of Montelius I and the earliest phase of Montelius II,<sup>6</sup> and thus it may be approximately contemporary with Brucker Forst. The razor with a long tang and badly damaged blade from Nebel, Amrum, which Kersten<sup>7</sup> thought might be a British export, comes from a woman's grave which is dated by a tutulus of Montelius IIA type.

Southwest German razors datable to a more advanced phase of the Tumulus Culture include those from Onstmettingen (grave assigned by Kraft<sup>8</sup> to his phase C); Spiez (Bronze Age occupation layer in settlement site, Reinecke C);<sup>9</sup> Hilzingen (grave dated to Reinecke C by Kimmig); and Alteiselfing (hoard with riveted sickle and sword related to Riegsee type, dated by Müller-Karpe to Reinecke D). The last-mentioned razor brings us to the period when late Tumulus and Earliest Urnfield Cultures existed side by side in South Germany.

#### B. *Comparison with British Razors*

Despite their evident differences, the South German tanged razors clearly have sufficient features in common with many British tanged razors to suggest that they are related. Although the notching of the South German razors calls to mind British Class II razors, the latter have narrow, slit-like notches while the former have very broad and shallow ones. The absence of midribs and holes in the blade and the predominance of rounded shoulders suggest that the Tumulus razors are more immediately related to Mrs Piggott's Class I razors than to her Class II.

Although the British razors are on the whole distinguishable at a glance from the Tumulus series, a few Anglo-Irish razors show distinctively Tumulus features. The most striking of these is P.60 from Carrickfergus, which has both the broad notch and the pointed tang, and would be quite at home in Tumulus territory except for its smaller size. The broad notch also occurs on some British Class II razors, as P.53 (Idmiston, Wilts.), P.64 (River Bann at Toome, Co. Londonderry), and P.77 (Kilgreany, Co. Waterford); tapering or pointed

6 *BRGK.*, xxxi, Part 2 (1941), 32-42

7 *Zur älteren nordischen Bronzezeit* (1936), 83; Taf. V, 6, 7.

8 Note that Kraft's C is placed by Holste (*Bronzezeit in Süd- und Westdeutschland* (1953), 114) in his Developed Tumulus phase (B2 in the Reinecke terminology), although its types may run on into Late Tumulus.

9 Thus dated by Kimmig, although Tschumi (*Urgeschichte des Kantons Bern* (1953), 21, 347-8, Art. 210, places the settlement in the Urnfield period. The form of the razor is very similar to that from Hilzingen.



tangs are also found on razors of Class I, as P.5 (Balnalick, Inverness) and P.37 (Port y Shee, Isle of Man) and Class II, e.g., P.81 (Adabrock, Lewis) and P.64.

A variant form is that presented by the razor from Alteiselfing, with angular shoulders and a short broad tang with two rivet-holes. This type of riveted tang (but with only one rivet) is paralleled fairly closely as to shape by British Class I razors: P.12 (Wigtownshire), P.32 (Amesbury, Wilts., present paper, Fig. 5), and P.35 (Grassington, Yorks.), and rather less closely by

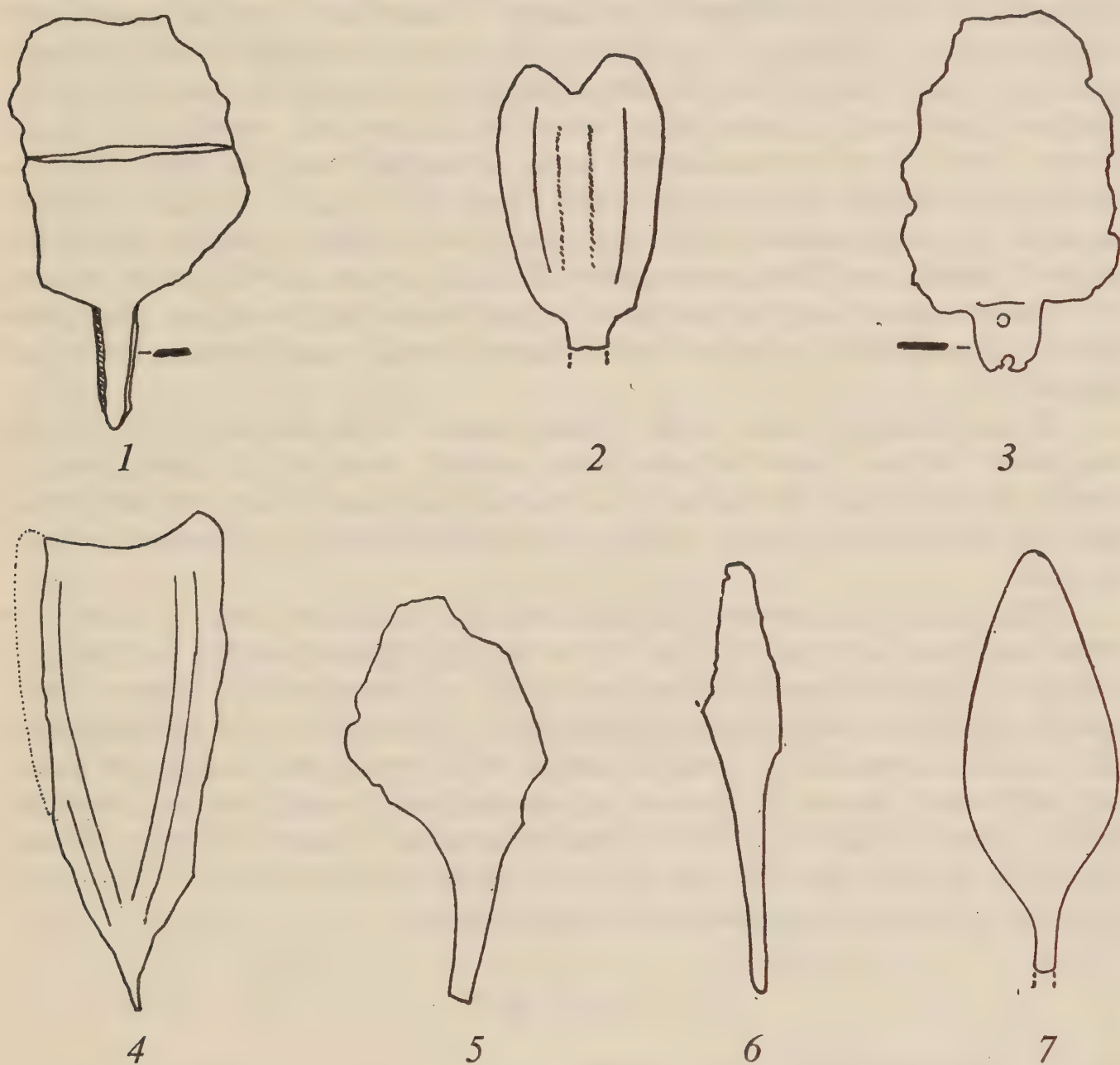


Fig. 3. Tumulus Bronze Age and North German tanged razors. (1) Unterbrunnham; (2) Provenance unknown; Mus. Cloppenburg; (3) Alteiselfing. After Müller-Karpe; (4) Hilzingen. After Funk and Kimmig; (5) Arndorf (distorted by fire). (6) Nebel, Amrum. After Kersten. (7) Nebel, Amrum, 'Ing Jongbun Berg'. After Olshausen. For details of finds see Appendix I. 1/2.



P.6 (Shanwell, Kinross), P.16 (Belclare, Co. Galway), P.29 (Priddy, Somerset), P.12 (Wigtownshire), P.19 (Carrowjames, Co. Mayo). The angular shoulders are not characteristic of Class I razors, but occur commonly in Class II razors in Britain and in Urnfield-period razors on the Continent.

Decoration provides another unmistakable link between the Tumulus and Anglo-Irish razors. Shallow fluting like that on P.1 (Tullochvenus, Aberdeen), P.60 (Carrickfergus, Co. Antrim) and P.34 (Winterslow, Wilts.; fluting omitted in Mrs Piggott's drawing), is found on Tumulus razors from Onstmettingen, Hilzingen and Spiez and on the probably North German specimen in the Cloppenburg Museum. Equally striking is the presence on the Brucker Forst and Onstmettingen razors of a decorated panel, oval in the former case and rectangular in the latter, arranged much like the panels on the Hiberno-Scottish group of decorated razors (P.1, 5-9, 11, 17, 24). Although the style of ornamentation is different (hatched triangles, lozenges and bands on the Scottish and Irish razors, lines of small arcs on the Tumulus razors), the similar arrangement on razors of related form can hardly be pure coincidence. *Pointillé* lines occur on both Hiberno-Scottish and Tumulus decorated razors.

Thus, although none of the British razors is so similar to any of the Southwest German ones that specimens actually exported in either direction can be claimed, there is evidently a common tradition behind the two series; and the Northwest German razors are in some respects typologically intermediate.

Other contacts between Britain and the Tumulus area at about the transition from Early to Middle Bronze Age (Reinecke A2/B1) are too well-known to require discussion here; we need only mention the bronze pins—spherical-headed with diagonal perforation (Camerton) and trefoil-headed (Bryn Crûg, Loose Howe; bone imitations of the type from Brough and one of the Aldbourne graves);<sup>10</sup> grooved ogival daggers;<sup>11</sup> small bronze cones and tubular beads (Migdale);<sup>12</sup> amber spacer beads with complex boring (Wessex period in Britain, but B2 and later in Southwest Germany).<sup>13</sup> The razor connexion is by no means an isolated phenomenon.

## PART II

### A. *The Dating of British Class I Razors*

In her careful analysis of the chronology of British Class I razors, Mrs Piggott pointed out that a number of them had apparently early associations,

<sup>10</sup> See p. 29 below.

<sup>11</sup> *Vide* ApSimon, *Tenth Annual Report*, Institute of Archaeology (1954), 45.

<sup>12</sup> See page 33 below.

<sup>13</sup> *Vide* Merhart, *Germania*, 24 (1940), 99.



the most outstanding examples being the razors from Calais Wold (P.36) and from Sandmill Farm, Stranraer, Wigtownshire (P.13). On the urn in which the Stranraer razor was found, Mrs Piggott commented: 'A date of approximately 1500 would be appropriate for this urn, if it had been found in the South of England . . .'.<sup>14</sup> She argued, nevertheless, that the evidence for early razors was inconclusive, and suggested that in Britain Class I razors fall within the limits 750-400 B.C. The principal factors in this conclusion were: (1) the absence of early Continental prototypes for Class I razors; (2) doubt as to the undeniably early Drouwen specimen being a razor; (3) the association of Class I razors of 'native' type (especially those with incised decoration, which must all be fairly close together in date) with 'late' types of cinerary urns; (4) the probability of Highland Zone retardation.

At the same time, Mrs Piggott allowed for the possibility that new evidence might disprove her hypothesis that no razors were to be dated before the eighth century in Britain. 'This hypothesis', she wrote, 'will no doubt be more critically examined when knowledge is accumulated. It may even be found that the custom of shaving went back to the Early Bronze Age in the north, and in that case such a razor as the Stranraer example might prove to be considerably earlier than it seems wise to place it at present.'<sup>15</sup>

The Tumulus razors cited above seem to tilt the balance of probability towards Mrs Piggott's alternative suggestion. We have seen that decorated tanged razors were known in South Germany from Tumulus B<sub>1</sub> onward; and that razors with oval blades were being made in North Germany, and used in Schleswig-Holstein and Drenthe, in a contemporary phase. These regions were demonstrably in contact with Britain and Northwest France at the time. It would indeed be surprising if comparable razors did not appear in Britain until six or seven centuries later.<sup>16</sup> As for the Drouwen blade, there now seems little reason to doubt either its character as a razor or its close relation to British Class I razors. It would be possible to believe on typological grounds that the Drouwen razor is an imitation of a British rather than of a Tumulus razor; this would imply a Sögel-Tumulus B<sub>1</sub> *terminus ante quem* for the origin of the razor in Britain. Alternatively, one could suppose that the Tumulus razors came first, that the Drouwen and North German razors are local

<sup>14</sup> *Loc. cit.*, 124.

<sup>15</sup> *Ibid.*, 126.

<sup>16</sup> Tumulus B<sub>1</sub>, a short phase, ends at about 1500-1450 on views currently prevailing. The low chronology of Childe and Hawkes (*PPS.*, xiv (1948), 197) would not reduce this date by more than a century at most: they allow B to *begin c.* 1500-1450. Brucker Forst and Drouwen are, then, earlier than 1350 at the most conservative estimate. Broholm I (Montelius IIA) should begin before the end of B<sub>1</sub>; but IIA in Schleswig-Holstein (with the Amrum razor) partly overlaps Broholm II in Denmark. Cf. Merhart, *Germania*, 24 (1940), 99; ApSimon, *loc. cit.*, 48ff.; Holste, *Bronzezeit in Süd- und Westdeutschland* (1953), 115-6; Childe, *Archivo de Prehistoria Levantina*, IV (1953) 167ff.



modifications of the Tumulus type, and that British razors are derived from these.<sup>17</sup>

The Continental evidence thus encourages a fresh examination of the British dating material, to see whether a tenable case can be made out for Mrs Piggott's alternative theory of a native and early origin for Class I razors in Britain.

### B. *The Dating Evidence Reviewed*

There are a number of associations of Class I razors in graves, in addition to the Stranraer example mentioned above, which appear to be as early as, if not earlier than, Drouwen and Brucker Forst. These are included in Groups 1 and 2 below.<sup>18</sup>

#### *Group 1: Razors accompanying inhumations*

1. *Rudstone, E. R. Yorks.* (Fig. 4: 1). With skeleton of large man and axe-hammer of Beaker type; one of three more or less contemporary graves, all containing objects normally associated with Beakers in Yorkshire.
2. *Barrow No. 2, Blanch Group, E. R. Yorks.* (Fig. 4: 2). With primary contracted inhumation in small mound.

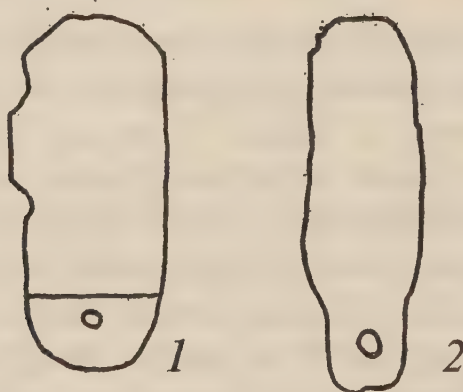


Fig. 4. Riveted blades from: (1) Rudstone (B.M.); (2) Blanch. After Mortimer. 1/2.

<sup>17</sup> Another route by which Tumulus razors may have reached Britain is of course France, where Tumulus-derived razors seem to be plentiful. An example from the Seine at Paris (Ashmolean Museum, Evans Coll., 1927/2037) has a blade with characteristically Tumulus features, including the very broad shallow notch; the tang, however, is pointed-oval in section, and this seems to be a peculiarly French development. The French Tumulus Bronze Age hoard from Porcieu-Amblagnieu, Isère (Déchelette, *Manuel*, ii fig. 49, 13) contains a comparable specimen. The gradual deepening of the notch can be traced on French Urnfield razors like those from Pougues-les-Eaux, Nièvre (*Matériaux*, 2me ser., x (1879), 385 ff.): one razor with long narrow tang, another with open-work ring-handle and an incised ladder pattern on the blade. Cf. Savory, *PPS.*, xiv (1948), 171.

<sup>18</sup> Razors additional to those included by Mrs Piggott in her Schedule will be listed serially; details and documentation are given in Appendix III. Razors which appear in Mrs Piggott's Schedule will be indicated by her numbers, prefaced by P. Other abbreviations are as follows:

SP.: followed by a number, indicates a grave-group listed by Professor Stuart Piggott in his Register of Grave-groups of the Wessex Culture in the Wessex Area, *PPS.*, iv (1938), 102-106.

S.: followed by a number, indicates a grave-group including faience beads listed by Beck and Stone, *Arch.*, lxxxv (1935), 234-251.



Both these razors are thin, double-edged, parallel-sided blades with a single rivet. That from Rudstone has no separate tang: the lower end is simply rounded off. It has a clearly defined straight hafting-mark, with vertical-grained traces of the handle adhering to the corrosion. Blanch has a slight narrowing of the haft end, producing a short broad tang. Although these blades might be regarded as small tanged knives rather than true razors, they are obviously the prototypes for the broad-tanged riveted razors like Priddy (P.29) and the Hiberno-Scottish razors like Belclare (P.16), Carrowjames (P.19), and Knockast (P.23).

This type of razor, with short broad tang and single rivet-hole, might be distinguished typologically as *Class IA*; since it has no known close counterparts on the Continent, it may be claimed as of native origin.

*Class IB* is characterized by the long narrow tang (only exceptionally with a rivet-hole, as P.17). The type may conceivably be derived from the small narrow-tanged blades occasionally found with Beaker burials: *Kirkcaldy, Fifeshire*, and *Well Glass Spring Cairn, Largantea, Co. Londonderry* (see Appendix III). The Kirkcaldy Beaker was thought by Childe to be 'typologically late and degenerate'; the fragmentary blade from Well Glass Spring Cairn was associated with a hybrid Beaker-Food Vessel in a double-portalled megalithic chamber which also contained 'several true Beakers'. A Wessex date would not be improbable for either burial. The blades are perhaps too small to allow them to be classed as razors (although Radley, P.26, accepted by Mrs Piggott as a razor, can scarcely have been much longer than the Kirkcaldy blade), but their narrow tapering tangs, rectangular in section, suggest that they are prototypes of the true razors of Class IB.

*Group 2: Razors with Wessex Culture associations*

3. *Stancomb Downs, Lambourn, Berks.* (Greenwell's CCLXXXIX): Class IB; with primary cremation, antler hammer, battle-axe, incense cup. SP.2.

P.30. *Priddy, Somerset*: Razor lost; originally described as 'part of a bronze spear- or arrowhead', suggesting that it had a narrow tang; it had been in a wooden sheath. The razor was with the primary cremation, associated with a heart-shaped amber bead, amber buttons, probably a faience bead (S.75), a bronze ring; nearby, and either contemporary or later, was a grape-cup. SP.27. (Note that this razor should not be confused with P.29, which came from another of the Priddy barrows.)

Possibly to be included in this group is the oval blade with imperforate tang from *Bryn Crúg, Carn.*, found with a cremation and urns (not preserved) in association with a small flanged axe with two side-loops and a broad stop-ridge, and with a bronze pin with three holes pierced in its flat bilobate head.<sup>19</sup>

<sup>19</sup> *Arch. J.* xxv (1868), 246; Wheeler, *Prehistoric and Roman Wales* (1925), 146; Fig. 48.



The edges of the blade appear somewhat thick in the published illustration, so that we hesitate to classify it as a razor; but in form it is clearly related to the razors of Class IB.

The Bryn Crûg pin is apparently a Southwest German type;<sup>20</sup> an example from Muschenheim, Kr. Giessen,<sup>21</sup> was found in a grave with an ogival dagger which is decorated with exactly the same combination of incised lines, small arcs and *pointillé* as is found on the Sögel dirks and the Brucker Forst razor. The dagger form needs no comment; the decoration, which occurs on daggers, dirks and swords over a wide area from Hungary to Denmark, is to Holste an important criterion in distinguishing the earliest horizon within the Tumulus Culture.<sup>22</sup>

The two side-loops on the Bryn Crûg flanged axe have been a puzzling feature; Wheeler<sup>23</sup> suggested a connexion with Iberian double-looped palstaves. But similar double loops occur on two evidently Irish Early Bronze Age decorated flat axes, one found in Northern Ireland,<sup>24</sup> and another in Denmark in association with a normal Irish axe of Megaw and Hardy's Type I.<sup>25</sup> Thus all three Bryn Crûg objects are consistent with a late Wessex or early Middle Bronze Age date. (It might be added that the motif of small arcs is extremely rare on bronzes in the British Isles, and its presence on the double-looped axe from Ireland and on a flanged axe from the same country<sup>26</sup> is no doubt to be attributed to Continental influences at this period.)

We come next to the question of the dating of Class I razors associated with cinerary urns. The difficulties involved in dating urns need no emphasis here; the paucity of closely datable associated objects, and the precariousness of dating by urn typology, make the subject highly controversial. From the point of view of method it would seem desirable to assume initially that neither the urns nor the razors can date each other, and to begin by singling out razor-urn associations which have a claim to be considered as Middle Bronze Age on grounds of *other* associations. In Group 3, then, can be placed urns and razors associated with objects of types (or, in one case, as a primary deposit in a barrow of a type) known to occur in Wessex Culture contexts and which do not demonstrably survive into the Late Bronze Age.<sup>27</sup>

*Group 3: Razors with Middle Bronze Age associations*

P.26. Radley, Berks.: Class IB; with primary female cremation in disc

<sup>20</sup> Parallels are cited by Holste, *Die Bronzezeit im nordmainischen Hessen* (1939), 50, n.3.

<sup>21</sup> *Ibid.*, Taf. 20, 4.

<sup>22</sup> *Ibid.*, 30.

<sup>23</sup> *Loc. cit.*

<sup>24</sup> Evans, *Ancient Bronze Implements* (1881), fig. 107.

<sup>25</sup> Butler, *Kuml*, 1955, 36 ff.

<sup>26</sup> Evans, *loc. cit.*, fig. 35.

<sup>27</sup> Conforming to the rule enunciated by Childe in another context (*PPS.*, xiv (1948), 182): '... in any typological division types of two consecutive phases must sometimes occur together; the rule is only that types of one phase must not mix with those of the next-but-one.'



barrow, associated with biconical pot with four vertically pierced lugs on the shoulder.

- P.34. *Winterslow, Wilts.*: Class IB; with secondary cremation in urn related to Cornish type; associated with bronze awl, 27 amber beads and buttons, some V-bored; human hair; linen wrapping; contemporary with biconical urn with two applied horseshoes and finger-printed shoulder.
- P.36. *Calais Wold, E.R. Yorks.* (Mortimer's C.70): Class IB; with secondary cremation in upright urn (base only preserved) and cord-ornamented incense cup.
4. *Broughton-in-Craven, Yorks.*: Class IB, with rivet-hole; with cremation in inverted urn (not preserved); also in urn were: stone battle-axe, apparently related to Hove type; perforated hone, 3ins. x c.1ins. x  $\frac{1}{2}$ in., conforming closely to hones found in Wessex culture graves; bone pins with perforated heads.

How much post-Wessex survival value is to be allowed the disc-barrow, the cord-ornamented incense cup, the battle-axe and hone of types found in Wessex graves, is admittedly difficult to determine, but it is perhaps reasonable to regard these graves as Middle Bronze Age on the grounds stated. Inclusion of the Winterslow group may occasion some surprise; but it is difficult to believe that V-bored amber buttons survived into the Late Bronze Age in Wiltshire. Confirmatory evidence for the relatively early dating of the Winterslow urns is provided by other associations (see Group 5).

Overhanging-rim Urns are normally assigned to the Middle Bronze Age, even in the Highland Zone. North of the Wash, Class I razors have occasionally been found in such urns.<sup>28</sup> Razor-urn associations of this kind we have placed in Group 4; to the list we append supporting evidence of date from other objects found in urns of similar type.

*Group 4: Razors associated with Overhanging-rim Urns*

The urns in question appear to be closely related to the Pennine series distinguished by Varley.<sup>29</sup> They are tripartite, with deep rims and rather elongated necks. Decoration—cord-impressed, incised, or fingernail—appears on the inner bevels of the rims; patterns on the outer surfaces of the rims are often elaborate and extend over the necks in the form of lattice, panels or hatched triangles. In fact these urns are differentiated from the Pennine type only by the absence of the line of pits round the shoulder, and perhaps by slight variations in the concavity of the neck.

5. *Ulverston, Lancs.*: Class IB; there are two urns from the site, one of

<sup>28</sup> As have small pointed blades with a single rivet-hole in a broad tang which appear to be related to the razors of our Class IA. See also specimen from Tara (O'Riordáin, *PPS.*, xxi (1955), 167).

<sup>29</sup> *Ant. J.*, xviii (1938), 161-6.



which is known to have contained an accessory vessel with encircling cordon; it is uncertain in which urn the razor was found.

6. *Broughton, Lincs.*: Class IB; primary in Barrow No. 3; with fragment of flint in upright urn covered by smaller inverted urn.

- P.13. *Sandmill Farm, Stranraer, Wigtown.*: Razor incomplete; in urn with battle-axe, decorated bone bead, three whetstones.

Since the urns associated with these three razors are so closely related to the Pennine series, and since the interesting custom of using a small inverted urn as a cover was practised by the makers of Pennine urns also, we may perhaps be allowed to use the objects found in Pennine urns, so conveniently summarized by Varley,<sup>30</sup> as dating evidence. Apart from incense cups, bronze awls and other objects, there are: a leaf-shaped arrowhead of flint (V.20); an archer's bracer (V.10); two knife-daggers with imperforate tangs (V.7, 4.5ins. long; V.20, 5 $\frac{3}{4}$ ins. long); small broad-tanged knives with single-rivet holes (V.4, V.13);<sup>31</sup> in urns V.19 were a (?) tanged knife, 3ins. long, with two rivet holes, jet, amber, and engraved bone beads and four segmented faience beads of normal type.<sup>32</sup>

The archer's bracer tends to confirm the suspicion that the tanged knife-daggers from V.7 and V.20 are derived from West European daggers; taken in conjunction with the segmented faience beads from V.19, these associated objects indicate that Pennine urns made their first appearance at a relatively early date.

In connexion with the Stranraer razor and urn and the question of Highland Zone 'retardation', we may recall the related urns from the flat cremation cemetery at Brackmont Mill, Leuchars, Fife.<sup>33</sup> Here several of the urns conform well to the Pennine type, apart from greater concavity of the neck. Two contained decorated incense cups. No. IX contained an ivory belt-hook and a bone toggle; of these the former is specifically, the latter less certainly, related to objects found in Wessex Culture graves. The combination of battle-axe, whetstones and bead found with the Stranraer razor and urn is in a general way suggestive of Wessex Culture connexions.

The supporting evidence only shows, of course, that some urns of this kind are likely to be relatively early, not that all are. Nevertheless, this allows for the probability that some of the razors in such urns may be early too.

It is curious that in the South razors have not as yet been found in association with Overhanging-rim Urns, but with vessels of a different type (Group 5). As will be shown, however, this has no chronological significance.

<sup>30</sup> *Loc. cit.*, 169-171.

<sup>31</sup> A similar knife was found beside Overhanging-rim Urns of uncertain type at Oldbury, Atherston, Warwickshire (Bloxam, *Fragmenta Sepulchralia* (1855), 22-3).

<sup>32</sup> Fox and Stone, *Ant. J.*, xxxi (1951), 31.

<sup>33</sup> Childe and Waterston, *PSAS.*, lxxvi (1941-2), 84-93.



*Group 5: Razors associated with urns in Southern England*<sup>34</sup>

In addition to P.26 (Radley, Berks.) and P.34 (Winterslow, Wilts.), which have been listed in Group 3, two further instances must be considered:

P.28. *Nether Swell, Glos.*: Class IB; with secondary cremation in cordoned urn with two bands of applied horseshoes, a small oval lug, and twisted cord impressions.

P.32. *Amesbury, Wilts., Barrow G.71*: Razor hybrid Class IA/IB; with secondary cremation in biconical urn with two horseshoes applied to the neck. See Appendix II and Figs. 5 and 6.

The fact that all five urns associated with these four razors are of types believed to belong to the Late Bronze Age, and that the shape of the urn from Amesbury recalls the situlate pots of Iron Age A, seems to have been a major factor in Mrs Piggott's dating of the razors.<sup>35</sup> It will therefore be of interest to examine the other associations of urns of this kind.

- i. *Bircham, Norfolk*:<sup>36</sup> Secondary (?) in bell-barrow: biconical urn with (apparently) two horseshoes in the neck and everted rim; almost identical with the urn from Amesbury G.71; inverted over cremation, bronze awl, six or seven biconical and globular gold-cased beads. Listed by Professor Stuart Piggott as a grave of the Wessex Culture outside the Wessex area;<sup>37</sup> the beads resemble most closely those from Normanton H.156 (SP.72).
- ii. *Roke Down and Bere Regis Down, Dorset*:<sup>38</sup> Biconical urns with everted rims and applied horseshoes; Roke Down has a line of pellets below the rim and another below the shoulder, perforated lugs on a plain shoulder cordon, and a raised cross inside the base; Bere Regis Down has a finger-printed shoulder cordon. Each urn contained a bead of sheet-bronze rolled to form a slender tube. The best (if not the only) British parallels for these beads are those associated with a B2 Beaker from the Beggar's Haven, Sussex,<sup>39</sup> and those in the Migdale hoard<sup>40</sup> (together with, *inter alia*, flat bronze axes and V-bored jet buttons).<sup>40a</sup>
- iii. *Ringwold, Kent*:<sup>41</sup> Biconical urn, with neat cord-impressed design above

<sup>34</sup> P.27, from South Lodge Camp, Dorset, has angular shoulders, which are (on present knowledge) not known until Reinecke D in Central Europe (Alteiselfing) and are a feature of Class II razors in Britain.

<sup>35</sup> *Loc. cit.*, 125.

<sup>36</sup> Lukis, *A Brief Account of the Barrows near Bircham Magna* . . . (Guernsey, 1843).

<sup>37</sup> *PPS.*, iv (1938), 92.

<sup>38</sup> Urns, Abercromby, *BAP.*, ii, 374-5 and p.39; beads, Beck and Stone, *Arch.*, lxxxv (1935), 213.

<sup>39</sup> Curwen, *Archaeology of Sussex*, (1954), Pl. XI, 3 and 4.

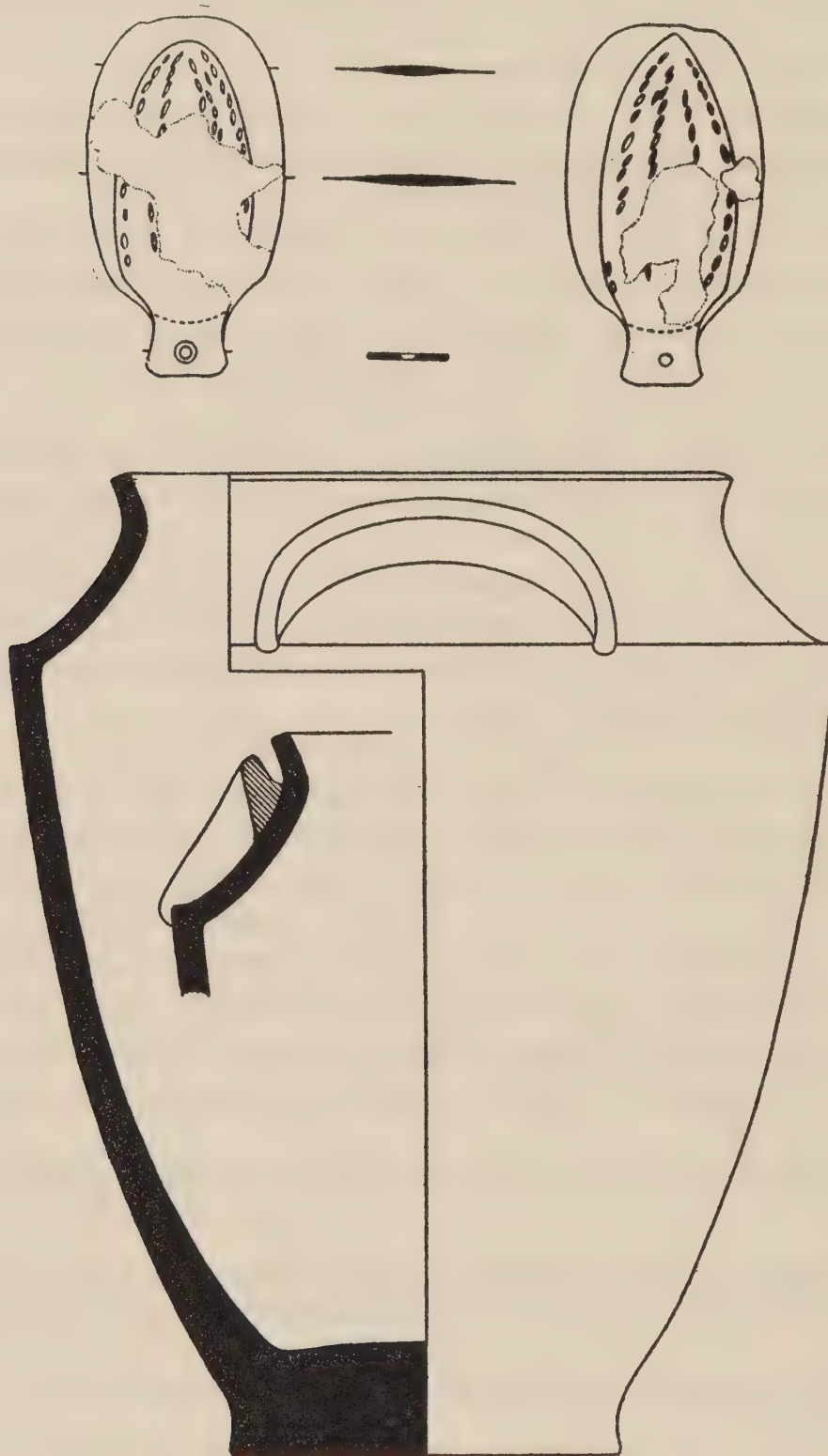
<sup>40</sup> Anderson, *PSAS.*, xxxv (1900-01), 266-275, fig. 1.

<sup>40a</sup> The early dating is supported by the new grave group from Tara (O'Riordáin, *loc. cit.*, 168).

<sup>41</sup> Jessup, *Archaeology of Kent* (1930), 121 and figs. 17: 1; 14: 3, 4.



shoulder and four horseshoes below. This contained a well-made biconical incense cup, another small vessel, three segmented and one globular bead of faience. S.9.



Figs. 5 and 6. Class I Razor (1/2) and Urn (1/4) from Barrow G.71, Amesbury, Wilts.



- iv. *Uncertain association: Idmiston Down, G.1 or 3*: Fragment of urn with 'horseshoes and other applied bands' and segmented faience bead. S.23.
- v. *Near Dorchester, Dorset*: Biconical urn with plain shoulder cordon and two small perforated knobs set upon it side by side; in addition to other beads, it contained one quoit and one star bead of faience. S.50. The contemporaneity of quoit and normal segmented faience beads has recently been recognized;<sup>42</sup> the Dorchester association shows that some star beads must also belong to the same period.
- vi. *Chard, Somerset*:<sup>43</sup> Biconical urn with lugs on shoulder; contained more than thirty amber beads, mostly discoidal, but some with hexagonal and biconvex cross-sections; a bead of 'greenish-blue glass'; a fragment of bronze. The amber beads would be matched more easily in Early than in Late Bronze Age contexts. The urn resembles that accompanying razor P.26 from Radley, Berks.: both are 6½ins. high and 4½ins. in diameter at the rim; the Chard urn has a slightly greater base diameter.

The Early Bronze Age character of the beads in the Bircham and Roke Down-Bere Regis Down urns hardly requires emphasis. There is no evidence whatever that the particular technique of gold-casing used on the Bircham beads was practised after the end of the Wessex culture. Of the tubular bronze beads it can at least be said that the relevant British parallels occur in early contexts and the same may be said of the amber beads from Chard. As for the date of faience beads in the South of England, we have a firmly fixed upper limit in Wessex culture graves, but in connexion with these beads in particular we must pause to consider the question of survival.

Since the publication of Beck and Stone's invaluable study of faience beads, it has been obvious that even the normal segmented variety occurs in association with a wide range of ceramic forms. Although these authors were clearly of the opinion that the beads belonged to one period and that therefore the associated grave-goods must be roughly contemporary,<sup>44</sup> they nevertheless were troubled by the apparently great chronological discrepancy in the urn types. Their approach to the question and that of the authors of later contributions to the discussion<sup>45</sup> has been dominated by considerations of urn typology based more or less closely on Abercromby's scheme, whereby Overhanging-rim Urns were supposed to have undergone a uniform process of devolution.

But, in the absence of abundant confirmation from stratified sites, ceramic typology is by itself an unreliable chronometer. Although Abercromby's scheme may in some instances be supported by evidence from barrows, there is

<sup>42</sup> Fox and Stone, *loc. cit.*, 29.

<sup>43</sup> *Proc. Som. Arch. and N. H. Soc.*, lxiii (1917), 116; urn, Abercromby, *BAP.*, ii, 433; beads, *ibid.*, O.14.

<sup>44</sup> Beck and Stone, *loc. cit.*, 220.

<sup>45</sup> E.g. Fox, *Arch.*, lxxxix (1943), 106ff., 126; Savory, *Arch. Camb.*, c (1949), 79ff.



usually no indication of the relative length of time which elapsed between the deposition of the primary and secondary urns. It seems safer therefore to date such urns as we can by the associated grave-goods.

In many cases the only approximately datable objects are faience beads. Since 'normal' segmented faience beads are likely to have been imported at one time, or to have arrived in a closely spaced series of shipments from one source, and since some quoit and star beads are seen to have been in use at the same time as the former,<sup>46</sup> the only question we are in a position to consider, pending the results of further detailed work on the origin of the beads themselves, is the length of time which elapsed between the acquisition of the beads and their deposit in graves. Unlike Savory,<sup>47</sup> we do not believe that such trinkets are likely to have had a high survival value. Not only do fashions in personal ornaments change, but beads are easily lost; and obviously every bead deposited in a grave reduced the number in circulation. We have clearly no means of estimating the total number of beads imported, but it is unlikely to have been large. Since so many Wessex Culture women took their beads with them to their graves (faience beads occur in twenty-five of the ninety-nine graves in the Wessex area listed by Piggott<sup>48</sup>), the dwindling of the supply must have been rapid. The regularity with which beads appear in these graves shows that this was an established custom, enforced by piety or social pressure. As the number of beads available was limited, the custom cannot have been observed for very long.

On these grounds we think it to be improbable that faience beads continued to be deposited in graves over a period covered by more than two or three generations; a century from the date of importation is the maximum that can reasonably be allowed. Similar considerations apply to locally manufactured ornaments of specialized types. If these arguments are valid, it follows that all graves (at any rate in the South of England)<sup>49</sup> containing faience beads or objects of Early Bronze Age type should belong, at latest, to the immediately post-Wessex period.

We may now return to the urns found in such graves. The supposed difficulty of fitting, for example, all the types of Overhanging-rim Urns into this brief span of time disappears if we simply forget Abercromby's devolutionary scheme and admit that all the major urn types (except, on present evidence, the globular) appeared at an early date. This applies not only to tripartite and bipartite Overhanging-rim Urns, but to the Cordoned and Encrusted Urns

<sup>46</sup> Confirmed by the finding of a star bead in an Early Bronze Age (Reinecke A2) settlement at Arbon-Bleiche in Switzerland. The site is described in a preliminary report in *JSGU.*, xxxvi (1945), 19ff.

<sup>47</sup> *Loc. cit.*, 81.

<sup>48</sup> *PPS.*, iv (1938), 80.

<sup>49</sup> And all graves, without geographical limitations, which contain normal segmented or quoit faience beads.



of the Highland Zone and to urns with relief decoration in the South. During the Middle Bronze Age varieties of urns may thus be regarded as cultural rather than chronological manifestations. The whole history of Bronze Age pottery and cultures seems to be on the one hand more complicated, and on the other simpler, than has hitherto been recognized.

It should be made clear at once that we do not intend to imply that *no* typological changes took place, but rather that, pending much more detailed examination of the whole problem, it is most unwise to date by typological criteria *only*. It must also be emphasized that here we are concerned merely with the date of the *initial* appearance of certain types of urns and not with the length of time during which they continued to be manufactured.

It should be recalled that in his original analysis of Bronze Age pottery, Abercromby placed urns with horseshoes (his Type III, Group 2) and urns with horizontal, vertical and undulating cordons (his Type III, Group 3) in a separate category from 'Deverel-Rimbury' urns (his Type IV). Of late, however, there has been a tendency to merge all these types into the 'Deverel-Rimbury' class. As we believe Groups 2 and 3 of Type III to be intimately related and not readily distinguishable, unless elaborately decorated, from Group IV (always excepting the globular urns, Abercromby's Deverel Group I, which represent an entirely different tradition), it will be convenient to consider them as a whole.

The origin of the 'Deverel-Rimbury' pottery has been the subject of much discussion, but Glasbergen's recent comprehensive review relieves us of the need to recapitulate it here.<sup>50</sup> We need only recall that British archaeologists have been accustomed to look to the Continent for its origin, although admitting that some traits must be native. Glasbergen, however, in his important study of Dutch cinerary urns, has been able to show that 'Deverel' urns cannot have come to Britain from The Netherlands, formerly the most favoured centre of dispersal, but rather that on the Continent they represent an emigration from Britain and that this movement took place long before the arrival in The Netherlands of Continental Urnfield cultures.

#### C. *Continental Evidence for the Date of British Biconical Urns*

Glasbergen has been able to single out two types of 'Continental Deverel Urns', which he has shown can only have originated in Britain: (1) Hilversum Urns, characterized by biconical form with cord- or finger-nail impressed patterns between rim and shoulder-cordon; (2) Drakenstein Urns, undecorated except for horizontal cordons. In both types the edges of the rims, the shoulder and other cordons may be notched or finger-printed. The fabric of these urns is, allowing for differences in the raw materials used, identical with that of British Middle Bronze Age urns. They have rough surfaces and are heavily

<sup>50</sup> Glasbergen, *Palaeohistoria*, iii (1954), 109-119.



gritted and poorly fired; shrinkage cracks are often present; the profiles tend to be irregular. Glasbergen believes the Hilversum Urns to be derived from British Overhanging-rim Urns by replacement of the lower edge of the rim with a cordon, and Drakenstein Urns to represent a further devolution, which took place on the Continent. Some members of the Drakenstein group, however, are just British biconical urns without cord-ornament, e.g., Glasbergen's Figs. 58, 5; 59, 14.

Hilversum Urns have a limited distribution in Belgium and The Netherlands; Drakenstein Urns are clustered round the same foci, but are more numerous. If really later than the Hilversum type, they indicate an expansion of the original colony from Britain. Highly significant are the facts that Hilversum and Drakenstein Urns are characteristically found in disc barrows and that ritual pits occur under these barrows, again signs of the translation of British Bronze Age funerary customs to the Low Countries. The few grave-goods found in Hilversum and Drakenstein Urns are equally exotic;<sup>51</sup> these include bone pins, probably the most common objects found in British cinerary urns, and a decorated bone bead and bone toggle, neither of which is a rarity in Britain. Grooved arrowshaft smoothers, such as occurred in one Dutch grave of this group, had a long history on the Continent; nevertheless it seems significant that this specimen is only the second<sup>51a</sup> found in The Netherlands and that several similar objects have been found in Wessex Culture or approximately contemporary graves in Britain—e.g., Wilsford H.18 (SP.89),<sup>52</sup> and Breach Farm, Llanbeddian, Glam.<sup>53</sup>

In our view, Hilversum Urns do not derive directly from British Overhanging-rim Urns; they belong basically to the biconical, relief-decorated group and the impressed patterns are simply imitations approximating to those used on the Overhanging-rim group. The notching of rims and cordons does not come from the latter source, but is proper to the series with relief ornament. The Ringwold urn, with a cord-impressed design on the neck and four applied horseshoes below the shoulder, shows this hybridization very clearly. This urn is the only British hybrid of the kind which contained datable grave-goods—normal segmented faience beads.

We have not made a systematic search for British parallels to Hilversum Urns and simply list below those which have come to our notice.

Tynning's Farm South Barrow, T.11<sup>54</sup> (Fig. 7, 1): Notched rim and shoulder-cordon; four lugs on shoulder; twisted cord impressions in groups of three

<sup>51</sup> Glasbergen, *Palaeohistoria*, ii (1954), 103.

<sup>51a</sup> Dr. Glasbergen informs us that another was associated with 'an extremely debased Beaker of Veluwe type' (Cf. *Om. Leiden*, OR. V (1911), 5-7, and Holwerda, *PZ.* iv (1912), Abb. 3); he thinks that little time can have elapsed between the last Veluwe Beakers and the Hilversum invasion.

<sup>52</sup> Cunnington, *Cat. of Antiquities in Devizes Museum*, i (1896), fig. 172A.

<sup>53</sup> Grimes, *PPS.*, iv (1938), p.113, fig. 4.

<sup>54</sup> Read, *PBUSS.* 2, No. 2 (1924), Pl. XI, 4; Taylor, *ibid.*, 6, No. 2 (1954-50), Pl. XVII, B.



between rim and shoulder; identical with the primary urn from Tumulus IB, Toterfout-Halve Mijl (Fig. 7, 2) (Glasbergen's Fig. 59, 1), except for greater height, lugs and more angular profile; it is possible that the original vessel may not have been quite so straight-walled as the reconstruction. The Tynning's Farm urn contained numbers of fossil crinoids; as pointed out by Beck and Stone,<sup>55</sup> these can be regarded as cheap substitutes for segmented faience beads (and have been found several times with such). We might therefore assume that this urn dates from a time when such beads were fashionable, though Taylor<sup>56</sup> indicates that the presence of the crinoids may be accidental.

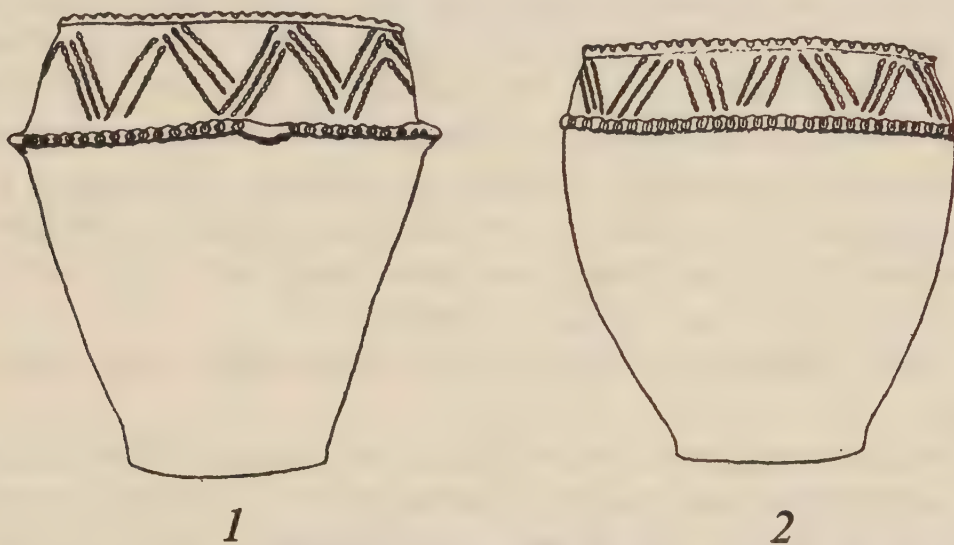


Fig. 7. Urns from: (1) Tynning's Farm South Barrow, T.11, Somerset; after Taylor; (2) Tumulus IB, Toterfout-Halve Mijl, North Brabant, Netherlands; after Glasbergen. No. 1, 16ins. high; No. 2, 11½ins. high.

Barrow No. 24, Thickthorn Down, Dorset (Durden Coll., British Museum, reg. no. 1892.9-1.241): Notched rim and shoulder cordon; rim of Glasbergen's type A (see his Fig. 56); lugs on shoulder, cord-impressed horseshoes in series on the neck. Probably to be connected with the latter is the cord-impressed design on an urn from Mont de l'Enclus, East Flanders (Glasbergen's Fig. 60, 8; de Laet and Roosens, *Arch. Belgica*, 14 (1952), Pl. IV, 2.). On the neck of this pot (which has a rim of type A and a notched shoulder-cordon) are four groups of three looped cord impressions, two of the groups being enclosed by a single line of cord.

A curiously exact parallelism in detail of rite and perhaps of barrow structure is to be noted in connexion with the Tynning's Farm and Mont de l'Enclus urns. In each case the urn was inverted on a stone slab, either hollowed (Mont de l'Enclus) or naturally perforated (Tynning's Farm), and was protected by a ring of large stones. In each case the urn was related to a secondary enlargement of an original ditched barrow; the secondary barrows had no ditches,

<sup>55</sup> *Loc. cit.*, 214.

<sup>56</sup> *Loc. cit.*, 150.



but probably were supported by stone revetments.

Oldbury Hill, Wilts. (Thurnam, *Arch.*, xliii (1871), Pl. XXX, 3): Primary in cist in barrow; decoration inside rim as well as in alternately hatched triangles above shoulder; notched shoulder cordon.

Bush Barrow, Salisbury Plain, Wilts. (Cunnington, *Cat. of Antiquities in Devizes Museum*, ii (1934), Pl. X, 3): Fragment; notched rim and shoulder-cordon, with cord-impressed hatched triangles between; oval lug below shoulder.

Mildenhall Fen, Suffolk (Clark, *Ant. J.*, xvi (1936), Fig. 6, 2): Rim approximating to type A; notches on outer edge of rim and on shoulder-cordon; perforated lugs on shoulder; fingernail impressions in oblique lines in neck. From the same settlement comes an interesting mixture of ceramic styles which on the whole are likely to be substantially contemporary and to reflect just the process of hybridization we have postulated. In addition to fragments of Overhanging-rim Urns (some of which may slightly antedate the rest), there are various biconical forms; one sherd with part of a vertical cordon, and another with part of an applied horseshoe.

A few other hybrids are figured by Abercromby—e.g., Figs. 425, 428, 431 and 491.

Present evidence suggests that relief decoration, apart from horizontal cordons, did not survive the sea-crossing in strength. But in 1953 an urn<sup>57</sup> (Fig. 8) was found between Budel and Weert, on the borders of the Dutch provinces of Limburg and N. Brabant, which is of biconical form and has five horseshoes applied to the shoulder. On the flat, externally projecting rim, in the neck and round the shoulder between the horseshoes, are cord-impressed patterns. Except for differences of detail, this urn is identical with one from Barrow B.47, Bulford, Wilts. (Salisbury Museum, reg. no. 139/48). (The form of these urns is well represented in Abercromby's Fig. 439, undecorated save for projections on the shoulder.) From the same barrow at Bulford comes another urn (reg. no. 132/48) with two horseshoes and two imperforate lugs; the rim is of Glasbergen's type A.

Glasbergen illustrates one pot (Fig. 58, 6) with four lugs; and another (Fig. 58, 2) with four short vertical cordons or lugs joining two notched horizontal cordons. This arrangement is paralleled on an urn from the Isle of Wight (Abercromby, Fig. 373 *bis*) and on one found in 1951 at Dugard Avenue, Colchester (Colchester Museum).

It thus becomes apparent that, from the evidence of their pottery, the settlers in Belgium and The Netherlands represented a special group which is distinguishable also in the South of England and that some degree of cultural

<sup>57</sup> Kindly brought to our notice by Dr M. E. Mariën and Dr W. Glasbergen; see also Glasbergen *Westerheem*, v (1956), Pl. XII.



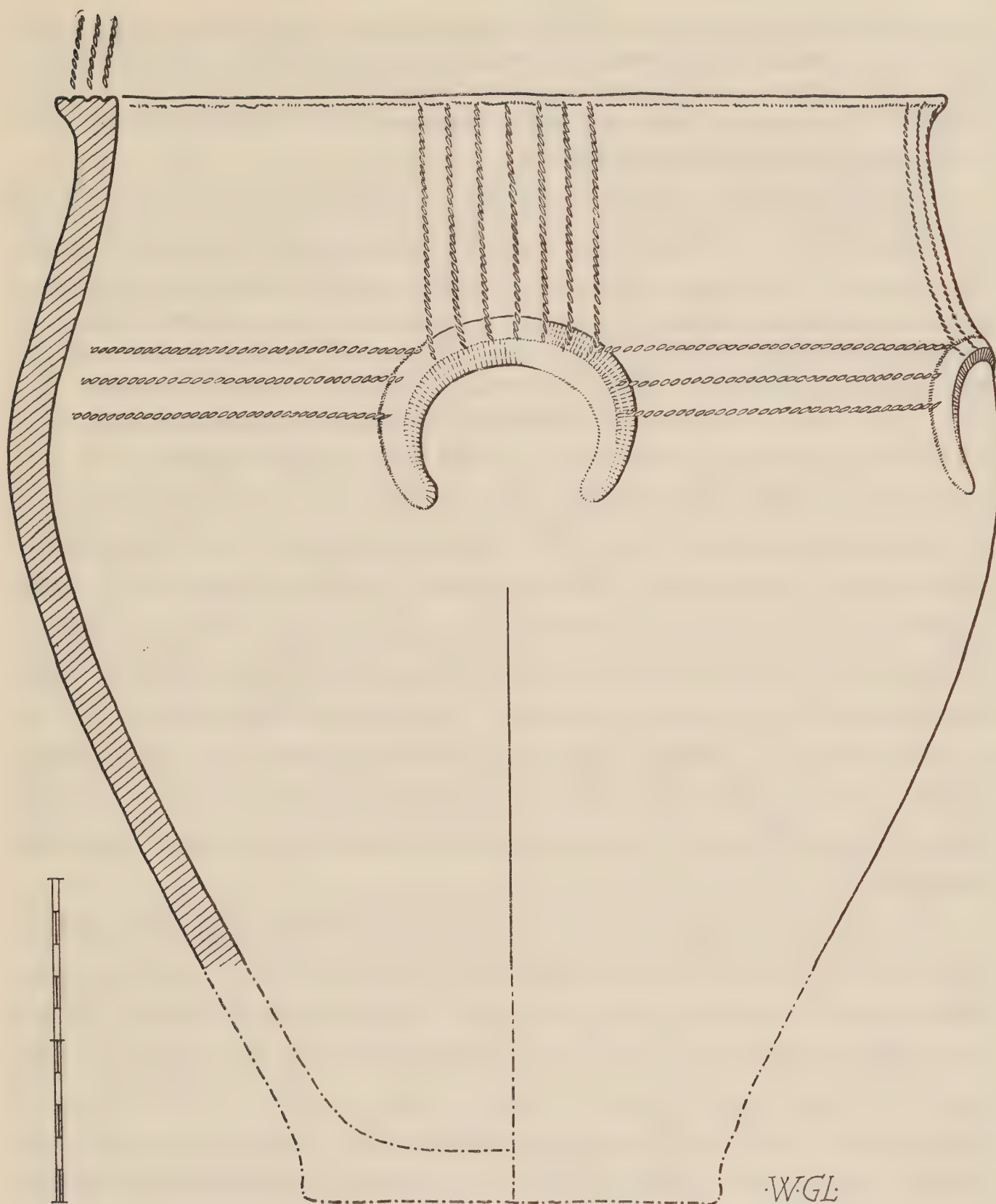


Fig. 8. Urn found between Budel and Weert, southern Netherlands. Drawing by Dr W. Glasbergen. (Scale in centimetres.)



fusion had already taken place before the migration. It is further of interest to note that the sherds of Hilversum Urns from the lowest layer of the site in the 'Wezelsche Bergen' at Wijchen were found in connexion with traces of square houses.<sup>58</sup> This throws a little new light, perhaps, on the dwellings occupied by the Bronze Age inhabitants of Britain.

It remains only to summarize briefly the Dutch evidence for the dating of this migration. In The Netherlands close dating of cinerary urns offers the same difficulties as in Britain; but through a combination of methods—careful stratigraphical excavation of barrows, extensive study of their soils and pollen content, and other techniques—useful results have been obtained. The most important evidence is that derived from Barrow IB in the Toterfout-Halve Mijl cemetery. Here the cord-ornamented biconical urn of Hilversum type (Fig. 7, 2), which resembles so closely that from Tynning's Farm (Fig. 7, 1), contained the primary cremation in a disc barrow; Drakenstein Urns were secondary. Although there were no grave-goods with the primary urn, Waterbolk was able to show on palynological grounds that the erection of the barrow was probably contemporary with the primary interment in the 'Zwartenberg', a disc barrow at Hoogeloon, which contained a bronze palstave chisel (Glasbergen, ii, Fig. 72). In Glasbergen's view, this evidence 'makes a dating of these monuments to an early phase of the Middle Bronze Age (Montelius II/III) seem probable'.<sup>59</sup> If he is correct in believing that the Toterfout-Halve Mijl Barrow IB was built by 'a clan . . . certainly of British origin', then the biconical urns of Tynning's Farm type must have appeared by that time in Britain. From the British side, this dating is supported by the segmented faience beads in the Ringwold urn; into the same context fits precisely the Odoorn necklace, with its amber and segmented tin and faience beads (Beck and Stone, 221).

Note may also be taken of the radiocarbon date obtained from charcoal found in the same primary urn from Barrow IB, Toterfout-Halve Mijl. The determination, by de Vries and Barendsen at the Physics Laboratory of the University of Groningen, was  $3450 \pm 100$ .<sup>60</sup> If the method is reliable, there is accordingly a 2:3 probability that the deposition of the urn occurred within the limits 1600-1400 B.C.; if we use instead the  $2\sigma$  range, doubling the stated limits, the probability of the urn having been deposited within the period 1700-1300 B.C. is 21:22. (This allows only for the counting error, and not for possible errors in the method.)<sup>61</sup> The radiocarbon determination is therefore consistent with the urn having been deposited within Montelius II (*cf.* Bro-

<sup>58</sup> Glasbergen, *loc. cit.*, iii, 123.

<sup>59</sup> *Ibid.*, 167-8.

<sup>60</sup> *Ibid.*, ii, 129, sample 74a.

<sup>61</sup> We are grateful to Professor F. E. Zeuner for advice as to the interpretation of the radiocarbon results. *Cf.* Zeuner, *Science Progress*, No. 154 (1951), 234-5.



holm's estimate of 1450-1400 to 1200-1100 B.C. for his Period II<sup>62</sup>), but not Period III. This at any rate agrees with the testimony of the 'Zwartenberg' palstave chisel, since there is really no reason for assigning it to Montelius III. The degree of reliance which can be placed upon radiocarbon determinations will undoubtedly become clearer as further results are published; for the moment this determination may be taken as affording confirmation for a Middle Bronze Age date for the Hilversum Urns in The Netherlands, and therefore also for their prototypes in the British Isles.

#### D. *The Origin of Southern Relief-decorated Urns*

We have seen that 'Continental Deverel' urns must represent a British Middle Bronze Age colony abroad and that it has so far been difficult to explain their ultimate origin. A small amount of new evidence is now available which throws the matter into a different perspective.

It is generally agreed that Overhanging-rim Urns derive mainly from Peterborough ware with some traces of Beaker traditions.<sup>63</sup> Childe has further shown that Encrusted Urns derive basically from Rinyo-Clacton ancestors.<sup>64</sup> We suggest that (except for the globular urns, which probably do represent the influx of a foreign group) all the features of 'Deverel-Rimbury' pottery derive from the southern facies of Rinyo-Clacton ware; that in fact the group we have preferred to call 'relief-decorated urns' is simply the southern counterpart of the Encrusted Urns of the Highland Zone.

It has been seen that chronologically there is no serious obstacle to this view. Despite their extraordinarily 'metallic' appearance, biconical urns with horseshoes cannot be skeuomorphs of bronze situlae (unless it could be shown that the latter were known towards the end of the Wessex Culture or immediately thereafter). Inseparable from this group is the urn of similar shape from the Southern Barrow at Oliver's Camp, Wilts. (Cunnington, *Cat. of Antiquities in Devizes Museum*, ii (1934), Pl. XIV). The latter is also, like the urn from Nether Swell, essentially a cordoned urn; it is encircled by four cordons with finger-prints, but it had two ribbon-handles similar to those on Cornish urns. It contained a small flat knife with two rivet-holes, probably not closely datable, but resembling the diminutive knives found in Wessex Culture graves (*cf.* SP.60 and 69).

To the same group may be added the urn from Barton Common, Hants. (Abercromby's Fig. 382), which contained three solid bronze beads. Though no relevant parallels have been found for these beads, we incline to the view

62 *Danske Oldsager, III: Aeldre Bronzealder* (Copenhagen, 1952), 42. Note that Broholm's Period II comprises Montelius IIb and IIc, but not IIa.

63 Piggott, *PPS.*, iv (1938), 91; Childe, *Prehistoric Communities of the British Isles* (1949), 146. It should be noted that *bipartite* proto-urns were already being produced by some Peterborough groups, e.g., at Peterborough itself (Leeds, *Ant. J.*, ii (1922), figs. 7c, 10 and others; and at Astrop, Northants. (Leeds, *Report Oxford Arch. Soc.*, 1912, figs. I and II).

64 *Loc. cit.*, 150.



that the custom of placing such ornaments with cremations was not inordinately long-lived. The urn is of the well-known variety with finger-printed cordons placed horizontally on the upper part, in a wavy band round the neck, and vertically from shoulder to base. The type sometimes bears a raised cross inside the base, as do some Cornish urns, and as does the Roke Down urn previously mentioned. The undulating cordons in the necks of some specimens of the Barton Common type are just contiguous horseshoes or variations on this motif.

A connexion of some kind seems to have obtained between Cornish urns and those with relief decoration. We have seen that raised patterns in the bases are common to both and that ribbon-handles might be borrowed—Oliver's Camp and perhaps Winterslow, where the urn which contained the razor and beads belongs essentially to the biconical group and is not a normal Cornish urn.<sup>65</sup> Further, there is the direct association at Winterslow of ribbon-handled and horseshoe-ornamented urns. Yet the horseshoes (which were probably ornamental rather than functional) and the cordons must represent a tradition independent of that manifested in the Cornish series. On the other hand, the rim-to-shoulder profile of Amesbury G.71, for example, is very like that of the four-handled jars from Brittany,<sup>66</sup> to which the Cornish urns are thought to be related; but the relief decoration cannot come from this source either.

Childe<sup>67</sup> has already suggested that the raised reinforcements in the bases of southern urns are like those in the bases of Orcadian Rinyo-Clacton ware. Although there is as yet no sign that this strengthening technique was used in the southern facies of the latter, evidence is accumulating that external plastic decoration of a kind particularly relevant to this discussion (horizontal and vertical cordons) was applied fairly commonly. In addition to the well-known pottery from Woodhenge, where a number of sherds have vertical cordons (e.g., Cunnington, *Woodhenge*, (1929), Pl. 25, Fig. 1; also Pl. 30, 36, with two vertical cordons, wrongly orientated in the illustration), there is the recently published group of sherds from Durrington Walls (Stone, Piggott & Booth, *Ant. J.*, xxxiv (1954) ). Of great significance in this connexion is the design of the reconstructed pot (*ibid.*, Fig. 7, 1), where the walls are divided into panels by vertical grooves. A small sherd (*ibid.*, Fig. 7, 12) probably came from a pot of similar design, but was divided into zones and panels by cordons. Unpublished pottery from the same site (in Salisbury Museum) includes sherds from three pots, each of which had the walls divided into panels by low ridges. Further, there is a pot, represented only by three joined sherds, with a rim form like that of the reconstructed vessel referred to above, but having on

65 Patchett, *Arch. J.*, cvii (1950), 59.

66 E.g., du Chatellier, *La Poterie . . .* (1897), Pl.13, 1 or Pl.15, 2.

67 *Loc. cit.*, 188-9.



the exterior below the rim an arrangement of cordons in arcades or a wavy band.<sup>68</sup>

One of the features which distinguishes the southern facies of Rinyo-Clacton ware from the northern is, as pointed out by Piggott,<sup>69</sup> the liberal use of finger-tip techniques; similarly, one of the features which distinguishes urns with relief ornament in the South from Encrusted Urns is the application of finger-prints to the cordons. Known from the South of England, but unfortunately still unpublished, are two large Rinyo-Clacton vessels which bore, along with elaborate grooved and rusticated patterns, horizontal and vertical cordons with transverse notches made by the fingernail.

The more complete is a pot from Stanton Harcourt, Oxon.,<sup>70</sup> which was found in a gravel pit. It is biconical, with a plain shoulder cordon from which descend ten vertical notched cordons towards the (missing) base. The other pot, from Dales Road Brickfield, Ipswich, Suffolk,<sup>71</sup> is much more fragmentary, but seems to have been of cylindrical or flower-pot shape. A notched horizontal cordon encircled it at an uncertain depth (probably 2-3ins.) below the rim; from this extended towards the base a series of notched cordons. Plastic ornament is also present in the form of a truncated cone,  $\frac{3}{4}$ ins. in diameter. This provides a link not only with Woodhenge ware, but also with the circular blobs on sherds from Skara Brae, on Encrusted Urns, and on some 'Deverel-Rimbury' urns: e.g., Roke Down (see p.33) and at Latch Farm, Christchurch, Hants. (C. M. Piggott, *PPS.*, iv (1938), 117, nos. 43 and 45). It may be recorded here as well that a small sherd of Rinyo-Clacton ware from Lion Point, Clacton,<sup>72</sup> has a line of pellets just like those on the pottery from the Orcadian and other northern sites (e.g., Rinyo: Childe, *PSAS.*, lxxiii (1938-9), Pl. XX, 5).

Slight though this evidence is, it does show that nearly all the characteristic features of southern relief-decorated urns had already appeared in Late Neolithic pottery. Although the horseshoes are not directly accounted for, they fit comfortably into this background. A series of horseshoes does appear, in fact, on an Encrusted Urn from Comber, Co. Down (Fox, *Ant. J.*, vii (1927), Pl. XXIV, 3), and more complicated arcades are common on such pots. The horseshoes may be viewed as a single (and significant?) motif selected from a wider repertoire; a similar selectivity and restraint is manifested in the abandonment of grooving and punctuation (as in the Rinyo-Clacton prototypes) and failure to adopt stamping and slashing (as in many Encrusted Urns).

68 It is possible, of course, that this is merely the surviving upper half of a lozenge pattern such as is seen complete on sherds from Rinyo and Skara Brae.

69 *Neolithic Cultures of the British Isles* (1954), 340.

70 In the Ashmolean Museum; to be published in *Oxoniensia* by Mr Nicholas Thomas and referred to with his kind permission.

71 Ipswich Museum, reg. No.1940-47.1.

72 S. Hazzledine Warren Coll.



Fox indeed suggested long ago that there must be some connexion between southern relief-decorated urns and the encrusted type, explaining both as differential manifestations of an invasion.<sup>73</sup> In the sequel it proved difficult to find an entirely plausible Continental ancestry for the horseshoes, vertical cordons and wavy bands,<sup>74</sup> and it was admitted that such must be of native origin.

Now that it is seen not only that cremation cemeteries were already used in Britain by two or more Late Neolithic groups,<sup>75</sup> that there can be no question of a 'Deverel' invasion from the Low Countries, and that some types of so-called 'Deverel' urns had appeared in England at latest by the early Middle Bronze Age, it is evident that the whole concept of the 'Deverel-Rimbury Culture' will have to be re-examined. This formidable task cannot be attempted here, but as a preliminary to it we should like to suggest that, in the light of the evidence surveyed above, the economical hypothesis of an indigenous (Rinyo-Clacton) origin for all save the globular urns should be seriously considered. Even though more or less precise Continental analogues can be found for the plastic ornament,<sup>76</sup> these need indicate nothing more than parallel developments. Since this kind of decoration was already in use in Britain before the Middle Bronze Age it seems unnecessary to invoke an invasion to account for its appearance in the latter period. Furthermore, in contrast with the British Middle Bronze Age emigration to the Continent, which is documented not only by exact similarities of pot form and decoration (including cord-impressed patterns which have no known precursors in the area of settlement), but in addition by associated grave-goods, barrows and even details of funerary rite of specifically British types, the hypothetical 'invasive Deverel-Rimbury Culture' would now appear to be represented solely by pottery. But a ceramic industry does not by itself constitute a culture.

#### E. Cordoned and Encrusted Urns in the Highland Zone

In the Highland Zone the dating of Cordoned and Encrusted Urns has been based in the past on the same three assumptions which we have shown do not hold good in the south of England: that urn- and cremation-cemeteries are exclusively Late Bronze Age phenomena; that Cordoned Urns can be explained in terms of Abercromby's typological scheme; that Class I razors must belong to the Late Bronze Age. Interpretation of the evidence has further been influenced by the explicit assumption that, after the Neolithic period at any rate, the North was a retarded area.

<sup>73</sup> *Loc. cit.*, 126-7.

<sup>74</sup> Preston and Hawkes, *Ant. J.*, xiii (1933), 438.

<sup>75</sup> Piggott, *Neolithic Cultures of the British Isles* (1954), 347 and 352-4.

<sup>76</sup> E.g., in France at Fort Harrouard (Philippe, *L'Anthr.*, 47 (1937), 278 and fig. 67, 5) and Camp de Chassey (Perrault, *Matériaux*, 1870, Pl. VI); in the Channel Islands (Hawkes, *The Archaeology of Jersey* (1938), 116-7). Impressed motifs, very like the horseshoes, appear above the shoulders of round-bottomed Neolithic pots at The Pinnacle in Jersey (Godfray and Burdo, *Bull. de la Soc. Jersiaise*, 1949, fig. 10).



But if Encrusted Urns are to reflect the strong survival and even expansion of a Late Neolithic culture,<sup>77</sup> they must first appear at a relatively early date. That in fact they do so is shown by the association of an Encrusted Urn with a normal segmented faience bead at Brynford, Holywell, Flintshire. (S.8 and Davies, *Prehistoric and Roman Remains of Flintshire* (1949), 47-8.)

A similar explanation can apply to Cordoned Urns;<sup>78</sup> in this case the use of twisted cord patterns may indicate adoption of the decorative techniques proper to Overhanging-rim Urns (by hybridization of a kind which has already been seen to have taken place in the South). The faience quoit bead (S.61) and bone crutch-headed pin associated with the plain Cordoned Urn from Balneil have clearly Early-Middle Bronze Age connexions, while the lugged chisel need not be later than Middle Bronze Age.<sup>79</sup> The Early Bronze Age character of the decoration on razor P.17 (Pollacorragune, Co. Galway), found in a Cordoned Urn, and the evidence adduced in Part I of this paper for the date of such decorated razors, point in the same direction. These arguments apply equally to the Knockast, Westmeath, razors (P.22-24) and associated vessels. Although it was admitted that this 'cemetery-cairn' contained objects which were 'typologically early', a Late Bronze Age date was assigned to it on the grounds that cremation-cemeteries must belong to this period.<sup>80</sup> Since this argument is no longer valid, it seems preferable to try to use the grave-goods as dating evidence. The slug knife and especially the five bone cylinders and the decorated razors should not be discounted. The Cordoned Urn with the plain razor (P.23, Class IA) differs only in detail of ornament from the Pollacorragune urn.

## CONCLUSIONS

i. British Class I razors may be divided into two sub-classes. *Class IA* has a short broad tang and a rivet hole. The prototypes of this group accompany Early Bronze Age inhumations in Yorkshire and the type may therefore be of native origin. *Class IB* has a long narrow tang and is usually unriveted. This group, which may be derived from small tanged blades occasionally found with late Beakers, is related to the tanged (and sometimes similarly decorated) razors of the Tumulus Culture on the Continent and was demonstrably in use in the South of England by at least the end of the Wessex culture.

<sup>77</sup> There is really no other acceptable hypothesis; the notched stamp impressions on some indicate merely the absorption, either directly or *via* Food-Vessels, of a Beaker technique.

<sup>78</sup> Cf. remark to the same effect made by Professor Piggott in a recent review of Glasbergen's study, *Ant. J.*, xxxv (1955), 237.

<sup>79</sup> Cf. Westbury-on-Trym, Glos., with decorated flanged axes (Megaw and Hardy, *PPS.* iv (1938), 284, fig. 11); Voorhout, South Holland, Netherlands: hoard with shield-decorated palstaves, flanged axes (Sprockhoff, *loc. cit.*, Taf. 26).

<sup>80</sup> Hencken and Movius, *PRIA.*, xli (1932-4), Sect. C, 233.



In both Lowland and Highland Zones the main period of use of both groups was the Middle Bronze Age. But that Class I razors continued in use into the Late Bronze Age is seen from the presence of Class I/II hybrids in hoards (P.31, Taunton; P.79 and 80, Glentool) and from the Ballymena mould, which bears forms for both classes (P.15 and 59).

ii. Biconical urns with horseshoes and other applied decoration, generally attributed to the 'Late Bronze Age Deverel-Rimbury Culture', appeared at the latest immediately after the end of the Wessex Culture in the South of England. A case can be made for the development of these urns from indigenous Late Neolithic Rinyo-Clacton ware. In the Highland Zone Cordoned and Encrusted Urns also appeared by the Middle Bronze Age and were derived in the same way from native Neolithic ceramic forms.

The dating of the southern biconical urns (some of which show the results of hybridization with the Overhanging-rim family) is confirmed by the evidence from The Netherlands, where it can be shown that a British colony using such cinerary urns had emigrated already during the Middle Bronze Age. (For one of these urns there is a radiocarbon date of  $3950 \pm 100$  B.P.)

iii. The cultural pattern of the Middle Bronze Age in the whole of the British Isles was, so far as ceramic forms afford a basis for cultural distinctions, much more complex than has been realized. Pottery types which formerly were believed to succeed one another are now seen to have been more or less contemporary and to represent the parallel survivals of several Late Neolithic traditions.<sup>81</sup> The only necessarily intrusive element of the 'Deverel-Rimbury complex' is the globular urn, the origin of which still remains uncertain and which has a limited distribution in the South; it appears that the makers of these vessels were quickly absorbed into native groups. The ceramic border between Middle and Late Bronze Ages now requires redefinition, for it is evident that 'Deverel-Rimbury' types and Cordoned (and perhaps Encrusted) Urns must spread over both periods; a refined analysis of typology and fabrics may afford clues.

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81 Food-Vessels must also have been current during part of this period.



## APPENDIX I

*List of Tumulus and North German Tanged Razors*
*South Germany and Switzerland*

1. *Brucker Forst, Ldkr. Neuburg a. d. Donau.* (Fig. 1, 2) Razor decorated (oval panel). Hoard (possibly grave): decorated spearhead, pin. *Germania*, 1952, 275, Fig. 1, 4-6. Mus. Singen.
2. *Onstmettingen, Wurttemberg, Grave 9.* (Fig. 1, 1) Razor decorated (rectangular panel), fluting on face, detachable bronze ring-handle. Grave: 2 daggers, saw blade, punch, pin. Kraft, *Die Kultur der Bronzezeit in Süddeutschland* (1926), 31; Abb. 3, 1-5.
3. *Hilzingen, Kr. Konstanz.* (Fig. 3, 4) Razor with fluting on face. Grave: spatulate flanged axe, bracelets. *Badische Fundberichte*, 1941-2, 270, Taf. 67A.
4. 'Burg', nr. *Spiez, Canton Bern.* Razor with fluting on face. Settlement site: Bronze Age occupation layer. *JSGU.*, 30 (1938), 55; Abb. 12, 6.
5. *Unterbrunnham, Ldkr. Traunstein, Grabhügel 2.* (Fig. 3, 1) Grave: rivets, small bronze spirals, etc. Mus. Munich. Unpublished.
6. *Alteiselfing, Ldkr. Wasserburg.* (Fig. 3, 3) Hoard: sword, sickle. Mus. Munich.
7. *Mucklenwinkling, Kr. Straubing.* Grave: two urns, spiral ring, dagger, pin. Unpublished.
8. *Arndorf, Ldkr. Feggendorf.* (Fig. 3, 5) Razor distorted by fire; grave. Mus. Munich.

*North Germany and Netherlands*

9. *Nebel, Amrum, Tumulus 'Ing Jongbun Berg'.* (Fig. 3, 7) Razor with tang broken off. Grave: cremation in small stone cist. O. Olshausen, *Amrum* (1920), 162; Abb. 89.
10. *Nebel, Amrum.* (Fig. 3, 6) Razor with long tang; blade damaged. Grave: tumulus. Kersten, *Zur älteren nordischen Bronzezeit* (1936), Taf. V, 7. Mus. Schleswig.
11. *Provenance unknown, probably Lower Saxony.* (Fig. 3, 2) 'Gef. in einem Urnenhügel.' Mus. Cloppenburg (Museumsdorf), König Coll. Unpublished.
12. *Schleswig-Holstein.* Exact provenance unknown. Kersten, *loc. cit.*, 83.
13. *Drouwen, Gem. Borger, Drenthe.* (Fig. 2) Razor with long tang. Grave: Sögel dirk, nicked flanged axe, gold spirals, hollow-based flint arrowheads, perforated whetstone; mortuary house. Van Giffen, *Die Bauart der Einzelgräber*, I (1930), 84-93; Taf. 83; Glasbergen, *Palaeohistoria*, iii (1954), 145; Fig. 68.

## APPENDIX II

*The Razor and Urn from Barrow G.17, Amesbury, Wilts.*

The razor and urn are in the Salisbury Museum, Accession No. 53/1931,



Catalogue Nos. 208 and 207; in the Museum's register it is recorded that the urn was found in May 1931 'inverted 6 feet N.E. of the centre of the barrow, the base of the urn being only 6 inches below the top of the barrow'. The razor was with the cremated bones covered by the urn.

The razor is No. 32 in Mrs Piggott's Schedule (*PPS.*, xii (1946), 137 and Fig. 5). It is shown in greater detail in our Fig. 5. The blade is very sharp and seems to have been hollow-ground; there are many fine striae indicating the use of a hone. The edges near the tang show the asymmetry which is characteristic of Class I razors; the medial thickening also terminates in a sharper point on one surface than on the other. The decoration, which has probably been applied after casting, consists of series of irregular shallow oval depressions arranged to form two pairs of lines which converge towards the end of the blade. These depressions are quite smooth, and seem to have been made by a punch with rounded edges; a few fine scratches over the surfaces of the blade suggest that grinding or polishing may have removed any roughness resulting from displacement of metal. Apparently the intention was to imitate a 'plantain' razor with cast ribs. The rivet-hole in the tang has bevelled edges on one surface and was evidently drilled.

Except where covered by patches of corrosion, the bronze has a highly polished and slightly iridescent patina. On both surfaces the corrosion seems to have preserved traces of a leather sheath. A semicircular mark left by the handle is visible at the base of the blade (indicated by a dotted line).

The urn (Fig. 6) is  $15\frac{1}{2}$  ins. high; the mouth is oval,  $9\frac{1}{4}$  ins. in diameter across the horseshoes and  $10\frac{1}{2}$  ins. in the other diameter. The diameter of the base is  $6\frac{1}{2}$  ins., and it is  $1\frac{3}{4}$  ins. thick. Two horseshoes have been applied in the hollow of the neck, their ends extending over the line of the shoulder. The vessel is complete except for a small portion of the base, which has been restored. It is fairly well fired and a light pinkish buff in colour. There are a number of shrinkage cracks. The clay is abundantly gritted with coarse fragments of burnt flint which project from the surface, especially towards the base.

### APPENDIX III

#### *List of razors additional to those included in PPS., xii (1946)*

1. *Rudstone, E. R. Yorks.*: (Fig. 4, 1) Greenwell's LXVIII. Parallel-sided blade,  $2\frac{5}{8}$  ins. long, with rounded ends; rivet-hole in undifferentiated tang; straight hafting-mark. Associated with axe-hammer of Beaker type and skeleton of large man. This grave was cut into another with inhumation, three-riveted dagger, jet 'pulley-ring' and V-bored button; a third contemporary inhumation was also accompanied by conical jet buttons. All three graves were sealed by a mound of trampled earth capped with



- chalk. Greenwell, *British Barrows*, 265; axe-hammer, Fig. 126. British Museum, reg. no. 1879.12-9.1061.
2. *Barrow No. 2, Blanch Group, E. R. Yorks.* (Fig. 4. 2) Oval blade with 'two keen cutting edges', broad tang with rivet-hole; end of blade apparently used as chisel. Primary in small barrow with 'doubled-up' skeleton. Mortimer, *Forty Years . . .*, 322-3; 438; razor, Fig. 956.
  3. *Stancomb Downs, Lambourn, Berks.*: Greenwell's CCLXXXIX. Bronze blade, overall length  $3\frac{1}{8}$  ins.; imperforate tang 1 in. long; blade  $\frac{3}{4}$  in. wide. Rested against primary cremation with battle-axe, antler hammer, incense cup. Greenwell, *Arch.*, lii (1890), 60-1; battle-axe and antler hammer, Figs. 26, 27; incense cup, Abercromby, *BAP.*, ii, 229. Grave-group in British Museum (reg. nos. 1879.12-9.1795-1803), but recent search failed to discover razor; there is, however, a sketch in the catalogue (No. 1799) which shows that it is similar in form to P.25 (Inkpen, Berks.), though the tang may be somewhat wider in proportion to the blade.
  4. *Broughton-in-Craven, Yorks.* Razor of Class IB with rivet-hole; less than 3 ins. long (tip missing) and less than 1 in. wide; the blade seems to have had a broad flat medial thickening or fluting; from the tang it curves outward on either side and narrows again towards the tip. 'It is sharp enough to shave a Sabine priest.' Found in 1675 with cremation in inverted urn (not preserved), together with stone battle-axe ('the *Securis Lapidea* or rather *Marmorea . . .* of speckled marble polished, 6 ins. in length,  $3\frac{1}{2}$  ins. broad. . . . The eye for the *Manubrium* to pass through is  $1\frac{1}{4}$  ins. in diameter'), a perforated hone ('The *Cos Olearia* is of a blewish Grey Hone, only half an inch in Thickness, though three long, and near one Broad, all its Parts Equal'), and bone pins with perforated heads. From the rather crude illustration, the battle-axe seems to resemble the Hove specimen. *Musaeum Thoresbyanum* in Whitaker's ed. of *Ducatus Leodiensis* (1816), 114-5; razor and battle-axe are Nos. 28-30 in 'Table of Antiquities', p. 116.
  5. *Ulverston, Lancs.* Razor 81 mm. long (tip missing), Class IB. Tang is rectangular in section,  $1\frac{1}{2}$  mm. thick at end, 3 mm. thick near blade; its line continues as broad oval thickening in blade, 3 mm. thick in centre, 1 mm. near tip. The edges of the blade are sharp. The razor may have been bent and snapped across deliberately or by the heat of the pyre. It was found in one of two pots of type related to Pennine urns, one of which contained also a small vessel with encircling cordon. ?Unpublished. British Museum, Greenwell Coll.; razor is No. 1879.12-9.1783.
  6. *Broughton, Lincs.* Class IB; end of blade missing; overall length approx. 51 mm. From Barrow No. 3; primary cremation in urn related to Pennine type and covered by smaller inverted urn. Fragment of flint included with cremation. Trollope, *Arch. J.*, viii (1851), 341-351, urn figured opposite



- p.344, razor on p.346. Larger urn, Abercromby, *BAP.*, ii, 77. British Museum; recent search failed to discover razor, reg. No. 1866.12-3.24; sketch in register.
7. *Keswick, Northumberland*. Class IB; end of blade missing, but still 79 mm. long. When acquired by the British Museum the razor was in a Food-Vessel, but the association is uncertain. Reg. No. 1870.10-13.4.
  8. *Possibly from Priddy, Somerset*. Class IB, with narrow midrib. An old, un-registered acquisition in the British Museum. Present reg. No. 1937.12-15.2.
  9. *Ty'n-y-Pwll, Llanddyfnan, Anglesey*. Class IA, part of blade missing. In Cordoned Urn, secondary in barrow. Baynes, *Arch. Camb.*, 64 (1909), 312 ff., Figs. 3, c, and 6. Identified as razor by Grimes, *Prehistory of Wales* (1951), 216.
  10. *Dalmore, Alness, Ross-shire*. Class IB (tang unusually long). Apparently flat oval blade (at least half missing), with characteristic asymmetry above tang. With cremation in cist in flat cemetery. *PSAS.*, xiii (1878-9), 256, Fig. 5.
  11. *Shuttlefield, Lockerbie, Dumfries-shire*. Class IA; in outline the blade resembles that from Broughton-in-Craven, Yorks. With a cremation in an inverted cordoned urn. Anderson, *Scotland in Pagan Times: The Bronze and Stone Ages*, 21-22, Figs. 15 and 16.
  12. *Kirkcaldy, Fifeshire*. Nearly complete bronze blade, tip missing; length 1½ ins. Tapering tang (*cf.* Largantea). Hazel-wood haft (not preserved). In cist with inhumation, Beaker, awl, flint flake, 12 conical 'jet' V-bored buttons, fusiform 'jet' bead. Possible razor prototype. Childe, *PSAS.*, lxxviii (1943-4), III; Pl. VIII, 1.
  13. *Campbeltown, Argyll*. Stone mould for razor (Class IB) or razor-like knife; on another face, mould for spearhead with loops on socket. Piggott, *PSAS.*, lxxxi (1946-7), 171; pl. XX: 1.
  14. *Laughton's Knowe, Holm parish, Orkney Mainland*. Razor 4 ins. long, Class I/II hybrid. Slight midrib on one side only. With hazel-wood sheath. Cremation in stone cist (speculatively described as secondary by Mrs Piggott) in mound. *RCAM*. Inventory, No. 368; Piggott, *PSAS.*, lxxxi (1946-7), 173; pl. XX:2.
  15. *Well Glass Spring Cairn, Largantea, Co. Londonderry*. Fragmentary bronze blade with short pointed tang (similar to P.60, also from Northern Ireland); overall length now 1 in. Found in secondary deposit which yielded two fragments of a bone dagger-plate, Beakers, Food-vessels, and plain, coarse pots. It has been suggested that this blade might be related to Palmella points, but these are always made of copper. Possible prototype for Class IB razors. Herring, *UJA.*, i (1938), pl.XX.



# The Gold Ornaments Reputedly Found Near the Entrance to New Grange in 1842

BY CELIA TOPP

THIS 'hoard' which consists of five objects, a chain, two bracelets, and two finger-rings, all of gold, was first reported and described by Lord Conyngham in 1842, the year of its discovery, as having been found together by a labourer 'within a few yards of the entrance to the New Grange caves'.<sup>1</sup> These five objects were acquired by the British Museum in 1884 and now form part of the collection of Romano-British Antiquities;<sup>2</sup> they have all been variously described and illustrated by a number of authors, but they have never before been published as a group nor described in the light of more recent knowledge and modern methods of investigation.

The chain (Pl. I, No. 3) is composed of fifty figure-eight shaped links; it measures 35.9 cm. in length and weighs 177 grns. It is No. 2744 of Marshall's Catalogue<sup>3</sup> and is there described as composed of 'eight-shaped links of double wire fastened at one end by a hook with root of square section and at the other by an eye with a similar root, the latter very bent and damaged'.

The first bracelet (Pl. I, No. 2.) is Marshall's No. 2795. It is made of two spirally intertwined wires tapering upwards from below; its diameter is 5.6 cm. and its weight 397 grns.; the catch is made by bending one end of the bracelet into a hook which has a globule at its tip and another at its root. A loop at the other end fits over the first globule, and there is yet a third at the base of the loop. The second bracelet (Marshall's No. 2796; Pl. I, No. 5) is very similar but thinner: its diameter is 6.7 cm. and its weight 319 grns.; it has no globule at the root of the hook.

The two finger-rings are described and also illustrated by Marshall and

<sup>1</sup> 'Description of some gold ornaments recently found in Ireland; a letter from Lord Albert Conyngham, F.S.A. to Sir Henry Ellis, K.H., F.R.S. Secretary.' *Archaeologica* XXX, 1844, p.137; Pl. XII. read 22.xii.1842. The Plate illustrates also a sixth object (No.6) which is a stray lunula found in the neighbourhood of Ardrah, Co. Donegal.

<sup>2</sup> They were all made available for inspection through the courtesy of Mr J. Brailsford, M.A., F.S.A., Assistant Keeper of the Department of British and Medieval Antiquities.

<sup>3</sup> F. H. Marshall, M.A., *Catalogue of the Jewellery, Greek, Etruscan and Roman, of the British Museum*, London, 1911, p.319.



are Nos. 869 and 870 of his Finger-Ring Catalogue.<sup>4</sup> The first (Pl. I, No. 4) consists of a hoop of three beaded wires joined together opposite the bezel and branching out at the shoulders; the middle wire is flattened out below. The spaces on the shoulders are filled in with double spirals of beaded wire interspersed with pellets. The bezel is in the form of an oval box-setting with an obliquely fluted rim round the base; it contains a plain nicolo paste. The dimensions of the ring are: diameter, 2.5 cm. (1in.); inner diameter, 1.8 cm. (.72in.); weight, 185 grns. (11.98 grammes); length of bezel, rim included, 1.5 cm. (.6in.). The second ring (Pl. I, No. 1) is of a kindred type. Its hoop consists of a doubly grooved ribbon with a waved beaded wire soldered on either side of it; these spread out into volutes on both sides at the shoulders. A large globule fills each space below the volutes, one of which is broken away. The bezel is an oval, almost round, box-setting with an obliquely fluted rim, partly broken away, soldered round it, and contains very cracked nicolo paste. The dimensions are: diameter, 2.5 cm.; interior diameter, 1.9 cm.; length of bezel, 1.7 cm., weight, 131 grns.

The circumstances of the find are somewhat dubious, though not more so than many others of the nineteenth century. Lord Conyngham says in his letter that the objects were accidentally found in December 1842 by a labourer 'within a few yards of the entrance to the New Grange caves'. They were found at a depth of about two feet without any form of covering or protection.

Now the nineteenth century was a golden period indeed as regards Irish treasure-trove. Labourers were growing wary and wise, and it is of course remotely possible that our particular labourer elected to locate his find in the legendary (and therefore perhaps more remunerative) setting of Brugh-na-Boinne. But against this possibility militates the fact, recorded by Lord Conyngham, that a second labourer, fired by emulative envy, conducted a further search in the same spot, and found nearby a denarius of Geta (ob.212) and two other small brass coins, quite defaced. Lord Conyngham is an impartial observer who appears absolutely convinced that the circumstances of the find are genuine; Armstrong,<sup>5</sup> however, seems to treat the matter with some reservations; but for our part Lord Conyngham's statement appears worthy of acceptance and belief.

Fergusson<sup>6</sup> complicates the issue by stating that 'a similar gold ring was found about the same time in the cell'. He even gives the name of its possessor, a Mrs Caldwell, and other details, and attaches great importances to the find

<sup>4</sup> F. H. Marshall, M.A., *Catalogue of the Finger-Rings, Greek, Etruscan and Roman, of the British Museum*, London, 1907, p.142 and Pl. XXII.

<sup>5</sup> E. C. R. Armstrong, *Catalogue of Irish Gold Ornaments in the Collection of the Royal Irish Academy*. Dublin Stationery Office, 2nd Edition, 1933, p.29.

<sup>6</sup> James Fergusson, D.C.L., F.R.S., etc. *Rude Stone Monuments in all Countries—Their age and uses*, London (Murray) 1872, pp.209-10.



because of its dating value. Now we know that Fergusson was in Ireland and visited Brugh-na-Boinne when he took rubbings of the engraved stones; but the find in question was already thirty years old by then, and that is an ample interval to allow for variations, additions and alterations to the truth. Another argument against Fergusson's account is that he obviously never saw any of the objects in person. He does not mention the chain at all and speaks of 'a gold coin of Geta'. He furthermore describes 'two splendid gold torques' (which description hardly fits our slender bracelets!), and he also mentions 'a brooch', meaning our damaged finger-ring. Now if one had not seen the objects themselves, but only studied the relevant plate in *Archaeologia*, this is exactly the impression one would receive. We conclude that Fergusson never actually saw the ornaments he describes so glibly, and this weakens our belief in his story, especially as we know that he greatly desired to lower the dating of these Irish chambered tombs in particular.

The find is also recorded and the objects illustrated and described more or less accurately by various other writers. Crofton Croker, in his catalogue of Lord Londesborough's collection,<sup>7</sup> makes use of the plate from *Archaeologia* XXX and quotes an early edition of Wilde<sup>8</sup> concerning the circumstances of the find and the 'torques'. He draws an interesting analogy between the chain, his No. 124, and his No. 98, to which we will turn in due course. Wilde, in his catalogue, refers to the chain as part of the Londesborough Collection and states that it was found 'along with several other gold articles'. He adds that there exists no similar specimen in the R.I.A. collection, and compares the chain with the gold ones mentioned in the Annals of the Four Masters under A.M. 3872 with which Muineamhon decorated the Irish chieftains of his day, and which are now 'very rarely discovered'. Fairholt's<sup>9</sup> Plate XVII (of his own devising) illustrates our five objects plus the Ardrah lunula plus a convex gold gorget found at Ballykilty, Co. Cork. Fairholt writes of 'the misapprehension of the original use and character' of the ring caused by the severing of the hoop from one side of the stone and its flattening out. He is in fact refuting in advance the false theory of the 'fibula' which was repeated fifteen years later by an incautious Fergusson. Croker, however, states that the rings are each set 'with a plain onyx'. Jones,<sup>10</sup> in his turn, reports the circumstances of the find, and illustrates the two rings. Incidentally and as a variation on a familiar theme he describes the 'stones' set in both rings as 'cut agates'. Wake-

<sup>7</sup> T. Crofton Croker, *Catalogue of a collection of ancient and mediaeval Rings and Personal Ornaments formed for Lady Londesborough*, London (Richards: for private reference), 1853.

<sup>8</sup> W. R. Wilde, *Catalogue of the Antiquities of Gold in the Museum of the Royal Irish Academy*, Dublin (Hodges, Smith and Co.) and London (Williams and Norgate), 1862, p.91.

<sup>9</sup> F. W. Fairholt, F.S.A., *Miscellanea Graphica. Antiques in the possession of Lord Londesborough*, London (Chapman and Hall), 1857, Pl. XVII.

<sup>10</sup> W. Jones, F.S.A., *Finger-Ring Lore*, London (Chatto and Windus), 1877, pp.61-2.



man<sup>11</sup> also mentions the objects, and Haverfield<sup>12</sup> refers to them in connection with the Roman coins. Kendrick<sup>13</sup> illustrates the undamaged ring, and O'Ríordáin<sup>14</sup> mentions the beaded wire filigree volutes of the rings which he tentatively dates to the 4th century A.D.

The most obvious analogies to our objects are to be found in the Guide to the Romano-British Antiquities of the British Museum.<sup>15</sup> The following are the most immediate analogies to the chain:

- (1) The pair of gold chains from Backworth (Northumberland), of ninety-five figure-eight shaped double links of gold wire. These chains have wheel and crescent pendants attached, and were found with coins, the latest of which belongs to Antoninus Pius (140 A.D.).<sup>16</sup>
- (2) The Llandovery gold chain, also of figure-eight shaped links of double gold wire, found in S. Wales in association with a pair of snake bracelets, which has a wheel pendant as its clasp; another wheel pendant was found with it.<sup>17</sup>
- (3) A similar triple gold wire chain from Hadrian's Wall, Newtown, Carlisle, found with coins of the first and second centuries, the latest of which belongs to Marcus Aurelius (ob. 180 A.D.).<sup>18</sup>  
To these we would add:
- (4) A much smaller object, more in the nature of a bracelet than a necklace, also from Backworth, with a wheel pendant similar to those of the chains found with it, though smaller and heavier.<sup>19</sup> It also is composed of double links of figure-eight shape which have a hollow gold bead strung in the middle of each, and it too belongs to the second century A.D.

Other apparently related gold chains are:

- (5) One of figure-eight shaped links of double wire with a gold crescent suspended therefrom.<sup>20</sup>

<sup>11</sup> W. F. Wakeman, *Handbook of Irish Antiquities*, 3rd Ed. by J. Cooke, M.A., Dublin (Hodges, Figgis and Co. Ltd). and London (Murray), 1903, pp.97-8.

<sup>12</sup> F. Haverfield, 'Ancient Rome and Ireland', *English Historical Review*, XXVIII, No. CIX, Jan. 1913.

<sup>13</sup> T. D. Kendrick, M.A., F.S.A., *Anglo-Saxon Art to A.D. 900*. London (Methuen) 1938. Pl. XXXII, No. 4.

<sup>14</sup> S. P. O'Ríordáin, 'Roman Material in Ireland', *Proceedings of the Royal Irish Academy*, Vol. LI, Section C, No. 3. Dublin 1947. p.35 and pp.79-80.

<sup>15</sup> *Guide to the Antiquities of Roman Britain*, Trustees of the British Museum. London 1951, p.28, p.14, and p.26.

<sup>16</sup> Marshall mentions both and illustrates one (No.2738, Pl. LXI, which from the description should read No.2739).

<sup>17</sup> Marshall's Nos.2741-2, belonging to the same period, i.e. 2nd to 3rd century A.D.

<sup>18</sup> Marshall's No.2716. He notes that the hook and loop are prolonged into spiral ornaments on either side.

<sup>19</sup> Marshall's No.2740.

<sup>20</sup> Marshall's No.2721.



- (6) One of double figure-eight shaped links with an engraved sardonyx pendant.<sup>21</sup>
- (7) Another similar one with a gold pendant of Severus Alexander.<sup>22</sup> These last two examples belong to the third century A.D.

A more remote analogy might be found in a gold chain necklace of pairs of figure-eight shaped links alternating with others in the form of a straight rod with a loop at each end, which has a crescent pendant strung on a wire in its centre, and is dated to the second century A.D.<sup>23</sup> A far better and earlier analogy is provided by a chain of gold figure-eight shaped links whose ends are attached to a disk surrounded by two beaded wires and a plain wire. This comes from Naukratis and is dated to the first to second centuries A.D.<sup>24</sup>

A very interesting analogy which appears to have passed unnoticed is that drawn by Crofton Croker with No. 98 of the Londesborough Collection. This is described as a gold chain of nine double links to which No. 111 of the same collection was attached by a bit of thread. This last is described as a small gold plaque of open filigree work decorated with spirals like the New Grange rings. Both the above items of the Londesborough Collection were acquired at Sotheby's in 1851 and both were described as supposedly Etruscan; but they were previously owned by the Rev. Dr Neligan of Cork and, supported by Crofton Croker, we strongly suspect that both these objects were found in Ireland. There is a marked similarity between the plaque illustrated by Crofton Croker and the clasp of the Llandoverly chain mentioned above. Croker says: 'comparison between the construction of this chain No. 98 with that of No. 124 (the New Grange one) and of this circular ornament with the workmanship of the rings Nos. 125 and 130 which were found in New Grange and purchased in Ireland would, when coupled with Mr Neligan's residence, lead to the conviction that this supposed Etruscan ornament had been found in Ireland.' In view of the similarity with the Llandoverly chain and its bow-spiralled beaded clasp might we not go a step further and advance the highly unorthodox suggestion that some of these ornaments had an Irish origin? At any rate, from the analogies quoted above, it appears likely that the New Grange chain originally had a pendant attached to it and that this was most probably a wheel-shaped one.

Analogies for the bracelets are far rarer; the Roman Guide mentions only one:

- (1) A stray one found in Sussex which is the exact twin of our first New Grange bracelet.<sup>25</sup>

<sup>21</sup> Marshall's No.2726.

<sup>22</sup> Marshall's No.2727.

<sup>23</sup> Marshall's No.2723.

<sup>24</sup> Marshall's No.2734.

<sup>25</sup> Marshall's No.2793, dated to c.3rd century A.D., part of the Payne Knight Collection.



With this was found:

- (2) Another similar one, more massive, with two rings of beaded wire soldered to its loop.

To these two we would add:

- (3) Another similar one which has a bead instead of a globule at the root of its hook.<sup>26</sup>

When looking for analogies to such a simple and obvious form as a bracelet of two intertwined gold wires, it is necessary to adhere to a distinctive feature, in this case the catch,<sup>27</sup> otherwise one would be led over a bewilderingly wide field. There are numerous other bracelets of this form in Marshall's catalogue,<sup>28</sup> but none of them has the same type of fastening as our New Grange ones. The most interesting is said to be *from Ireland*, and has a group of sunk *bow-spiral* ornaments on a plate at its top.<sup>29</sup>

A bronze bracelet in the British Museum could be described as a copy of

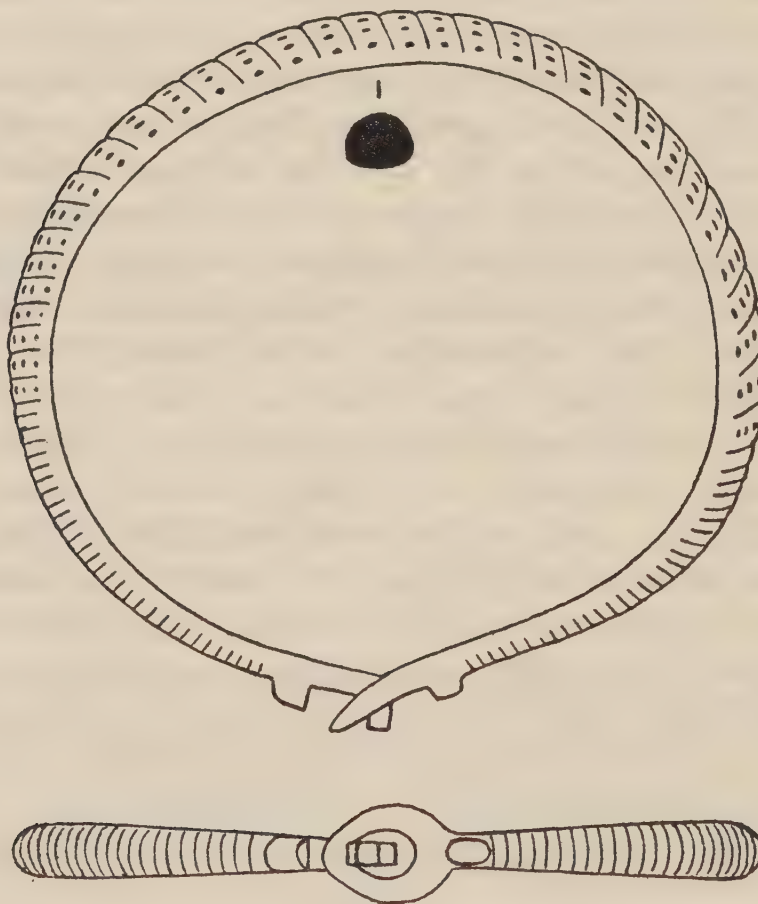


Fig. 1. Bronze bracelet in the British Museum by permission of the Trustees.

<sup>26</sup> Marshall's No.2796. This belonged to the Castellani collection which appears to have contained many objects of Irish type, *e.g.* Marshall's No.2766, a Tara torque with hooked terminals.

<sup>27</sup> As pointed out to us by Mr Brailsford.

<sup>28</sup> Such as his Nos.2801-4, 2806-9, 2812-5, all of non-British provenance.

<sup>29</sup> This is Marshall's No.2800. The italics are ours.



one of our bracelets, although it is made of apparently solid bronze; it has a loop and hook terminal with a spur to represent the globule at the root of the hook, and is decorated with alternate oblique grooves and lines of punched dots in imitation of twisted wires; it appears to be unique.<sup>30</sup> (Fig. 1.)

As rings of kindred type to the New Grange ones we would cite:

- (1) One whose hoop is a fluted gold band with a beaded wire on either side; these branch outwards at the shoulders and the spaces so formed are filled in with double spirals interspersed with globules. The bezel consists of an oblong convex paste of green glass set in gold, with an obliquely fluted border. This comes from Rome and is dated to the 4th-5th centuries A.D.<sup>31</sup>
- (2) Another<sup>32</sup> consisting of a hoop of three beaded wires soldered together, which also branch out at the shoulders leaving spaces which again are filled with wire spirals. The bezel is a rectangular box-setting with obliquely fluted rim containing a nicolo paste shaped like a truncated pyramid, inscribed 'MACRIOLA' in reverse direction. Of the same date as (1).
- (3) A ring of similar type and date from Havering, in Essex, with hoop of three beaded wires soldered together from below and branching out at the shoulders, where the spaces are filled in with double spirals of beaded wire. The bezel is an oval box-setting containing a nicolo paste intaglio depicting Bellerophon riding Pegasus and slaying the Chimaera.<sup>33</sup>
- (4) Yet another gold ring of similar type and date from Richborough, in Kent.<sup>34</sup> It has a soldered filigree hoop of branching wire spirals interspersed with pellets, and an oval bezel, of gold throughout, with obliquely fluted rim, showing two clasped hands in relief.
- (5) Two gold rings elaborately ornamented with filigree found in 1824 at Terling Place, near Witham in Essex, in association with a large hoard of gold and silver Roman coins of the 4th and 5th centuries A.D. and 'several vases'. They are first mentioned in the *Archaeological Journal*,<sup>35</sup> and the writer notes 'the considerable resemblance' between them and the New Grange ones. Jones<sup>36</sup> illustrates and describes the one which is most like the Irish rings. Its hoop is a solid central band with beaded wires on either side which branch out at the shoulders into double spirals set with a central pellet. The bezel is an oval box-setting with a fluted rim set with a

<sup>30</sup> Pointed out by Mr Brailsford, No.56, 7-1. 826. Part of the Roach Smith Collection.

<sup>31</sup> Marshall's No.868. Part of the Franks Bequest.

<sup>32</sup> Marshall's No.653. Formerly part of the Londesborough Collection; not mentioned by Crofton Croker or Fairholt.

<sup>33</sup> Marshall's No.571.

<sup>34</sup> B.M. Roman Guide, Fig. 13, No.7.

<sup>35</sup> *Archaeological Journal*, Vol. III, 1846. pp.162-3: a communication by Mr James Talbot in 'Archaeological Intelligence'.

<sup>36</sup> *Op. cit.*, p.23.



paste composed of two different-coloured layers bearing the impression of what appears to be an ear of corn.

- (6) Yet another very similar ring, reported found on Stanmore Common in 1781, is illustrated in Gough's *Camden*.<sup>37</sup> It consists of a hoop composed of branched double spirals interspersed with pellets in the usual manner, and its fluted bezel is engraved with a peculiar device depicting three birds.

From the above considerations we may deduce that our five gold objects form a comparatively homogeneous find; the chain can be dated roughly to the second or third century A.D., the bracelets to the third, and the rings to the fourth or fifth. But it is far harder to determine the nature of the deposit than to fix its approximate age. Is it a votive offering to a still-venerated deity outside his yet-hallowed sanctuary? Or does it represent a family treasure secreted in an easily recognized spot in troubled times and never afterwards recovered for obvious reasons? Or yet again, is it a pirate's hoard or a raider's loot buried near a conspicuous landmark and never reclaimed?

Both Borlase<sup>38</sup> and Chart<sup>39</sup> mention the gold objects found during ploughing operations in 1817 and 1824 at Ballylumford in Antrim. At Ballylumford is a dolmen, of rectangular shape,  $\frac{3}{4}$  of a mile S.S.W. of Brown's Bay in the Island Magee peninsula. Borlase furthermore says that the dolmen formerly stood within a stone circle, emphasizing the importance of the site. In a cutting from the *Dublin Penny Journal* of December 29th, 1832, (of which Mr Hodges of Queen's University, Belfast, kindly sent us a photostat copy) it is stated: 'In ploughing the field in which this altar stands, in 1817, a spiral instrument of pure gold, eleven inches in length, was discovered; and a few years after several detached parts of a gold collar or torquis were dug up near the altar. In March several spiral gold ornaments . . . were turned up by the plough about three or four feet from the altar.' The objects have proved untraceable but a rough sketch in the same *Journal* clearly depicts a ribbon torc of the type illustrated in Armstrong's *Catalogue*, Plate XIII, Nos. 115-36.

Another hoard of a different nature is reported by Obermaier<sup>40</sup> near the entrance to Cueva de la Pastora in the province of Sevilla. This is a tholos tomb, buried in a tumulus, with an unusually long and narrow passage. In 1860, under a large flag near the entrance, 'an urn' was found which contained thirty 'bronze' arrowheads, with round shafts, between 15-27 cm. in length. These are described as being of an Eastern type and Obermaier suggests that the find represents a Late Bronze Age hoard; but might it not equally well

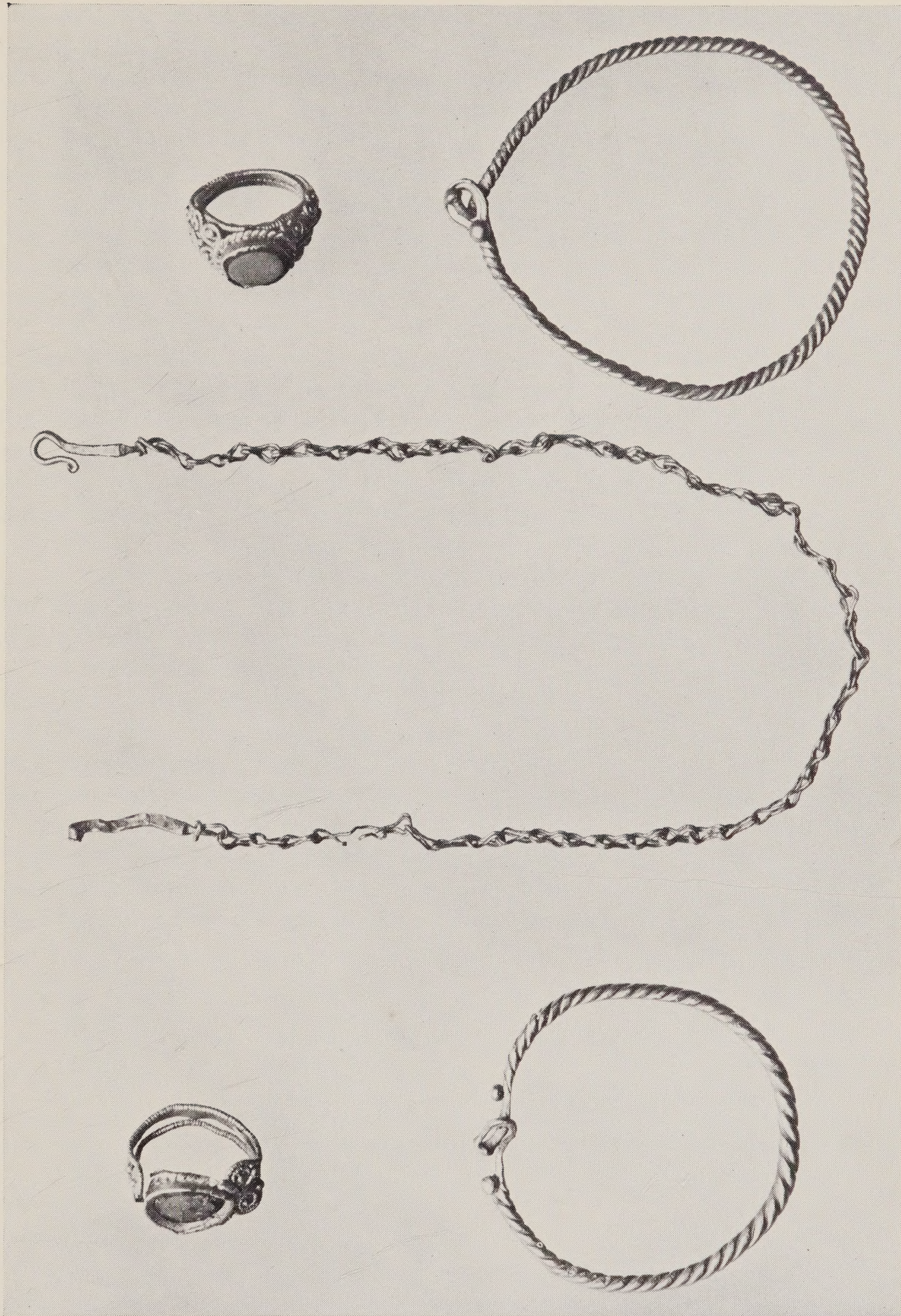
<sup>37</sup> Richard Gough, *Translation and edition of William Camden's 'Britannia'*, 2nd ed. London 1806, Vol. I, p.cxx.

<sup>38</sup> W. C. Borlase, M.A., *The Dolmens of Ireland*, London (Chapman & Hall) 1897, Vol. I, pp.269-70.

<sup>39</sup> D. A. Chart (gen. ed.), *A Preliminary Survey of the Ancient Monuments of N. Ireland*. Belfast 1940. p.35.

<sup>40</sup> H. Obermaier, *El Dolmen de Matarrubilla, Sevilla*. Comisión de Investigaciones Palaeontológicas y Prehistoricas. No. 26. Madrid 1919.











partake of the nature of a votive offering? Leisner<sup>41</sup> notes the find and mentions that Siret describes the arrowheads as made of pure copper. It strikes us, maybe erroneously, that there is a marked difference between the above finds and the far-later Viking hoard of silver coins, from the Mount Scrabo cairn,<sup>42</sup> buried under the outer edge of the huge slab outside the chamber, though this last find is illustrative of the use of a conspicuous cairn as a cache.

The idea of a votive offering to the deity of Brugh-na-Boinne is not as far-fetched as it may appear at first sight; we have conclusive evidence of the prolonged duration of the megalithic religion in certain remote areas. The *allée couverte* of Tressé,<sup>43</sup> Ille-et-Vilaine in Brittany, is a megalithic tomb in the old tradition utilized if not built in the Iron Age. Similar evidence is provided by the cruciform tomb of cairn H at Loughcrew<sup>44</sup> which (as Dr Raftery has convinced us) belongs to the Iron Age in construction as well as in utilization. We may incidentally recall, the resemblance, noted by Collum, between the design on a flint blade from a 'tombelle' situated near the Tressé monument and that on the La Tène compass-engraved bone flakes from Loughcrew H found in the undisturbed basal layer and therefore belonging to the primary construction-period of the tomb. Further illustrations of continued reverence to ancient burial places are provided by the deposition of Gallo-Roman votive offerings in many Breton dolmens, of which Déchelette<sup>45</sup> quotes fairly numerous instances. We would also note Marinatos' recent observation that in the sixth century the Greeks instituted hero cults in several Mycenaean tholoi<sup>46</sup>—another striking example of veneration-survival.

Besides the above examples we have such evidence as that provided by the councils of Arles (452), of Tours (567), of Nantes (658), and of Toledo (681 and 682), whose decrees inveigh against the continued worship of trees, fountains, and stones. As late as 789 Charlemagne's edict of Aix-la-Chapelle fulminates against their cult and orders their desecration and destruction. The evidence of survival of megalithic rites in Ireland itself up to a late period is instanced by the continued practice of horse-races held at Knockmany until comparatively recent times 'possibly a survival of ancient games'. This example cited by Coffey<sup>47</sup> is but one of many instances such as games at Heapstown,

41 G. & V. Leisner, *Die Megalithgräber der Iberischen Halbinsel* (Römisch-Germanische Forschungen, Band 17), Berlin, 1943. Vol. I, p.195.

42 *Ulster Journal of Archaeology*, Vol. III, 1855, pp.315-21. R. MacAdam, 'Opening of a Cairn on Scraba Mountain (Co. Down) and Discovery of Danish coins.'

43 V. C. C. Collum, *The Tressé Iron Age Megalithic Monument*, Oxford, 1935.

44 J. Raftery, M.A., PH.D., 'Ein Megalithgrab der La Tène Zeit', *Actes du 3ème Congrès International des Sciences Préhistoriques et Proto-historiques*. Zurich, 1953, pp.284-7.

45 J. Déchelette, *Manuel d'Archéologie Préhistorique Celtique*, Vol. I, p.396. Paris 1924.

46 Compare J. M. Cook, 'The Cult of Agamemnon at Mycenae', *Geras Antonoui Keramopoullou*, Athens 1953, p.114-5. Professor Childe informs me that at the International Classical Congress in Copenhagen in 1954 Professor Marinatos read a paper elaborating this point.

47 G. Coffey, *New Grange and Other Incised Tumuli in Ireland*, Dublin (Hodges, Figgis & Co. Ltd.) and London (Williams & Norgate), 1912 p.98.



'rounds', 'patterns', holy wells, votive offerings of pins and rags, and all the other Eastern Mediterranean practices once so popular in remote regions such as Brittany and Ireland, and even now not yet extinct. We ourselves favour the ritual and votive character of this burial of five gold objects of intrinsic and artistic merit, and would class it as possible evidence of continued veneration of megalithic monuments at this late period.

In conclusion we might indulge in a little speculation as regards the origin of the ornaments. The rings must certainly be Roman, as all the above authorities agree, and, as a distribution map of the analogies would show, they are fairly widespread in the Roman Empire. If they had been local copies of Roman originals, it would have to be assumed that the Irish goldsmiths had learned the Etruscan and Roman techniques of filigree work. On that assumption these goldsmiths could certainly have executed such copies, for it is impossible to admit that the Irish smiths had lost their cunning since the Bronze Age, as a glance at the Irish metal *objets d'art* of the 2nd to 4th centuries A.D. should suffice to prove. These seem too numerous to be all imports from the workshops of Southern England, as Jope<sup>48</sup> suggests may be the case for many. The distinctive Irish derivatives of the early Arras three-link bits<sup>49</sup> prove that the native bronzesmiths were producing objects in the La Tène style by then. At the same time the supplies of Irish gold could hardly have been quite exhausted by the beginning of our era. Similarly, the chain and its analogies from Llandovery and Backworth, together with the dubious Etruscan specimen from Croker's catalogue, although belonging to an enormously widespread type, are not beyond the technical competence of Irish goldsmiths; indeed the hollow gold beads of the Backworth bracelet afford some positive evidence for Irish origin, since they are miniature editions of the hollow golden balls from Carrick-on-Shannon. The two bracelets are not so easily paralleled outside Britain. Certainly there were many bracelets made of spirally twisted round gold wires, but in general the construction of the catch seems to be different. In fact, the only exact analogies we have found all come from the British Isles, and these could of course just as easily have been made of Irish gold as of foreign imported material. So for the two bracelets we would urge the consideration of a possible Irish origin in view both of craftsmanship and raw material.

48 E. M. Jope, *Ulster Journal of Archaeology*, 3rd ser. Vol. 17, pp.92-6. 'The Keshcarrigan Bowl and a bronze mirror-handle from Ballymoney.'

49 Ward Perkins, *PPS.*, V. 1939, p.182; E. T. Leeds, *Celtic Ornament*, pp.117-8. Oxford 1933.